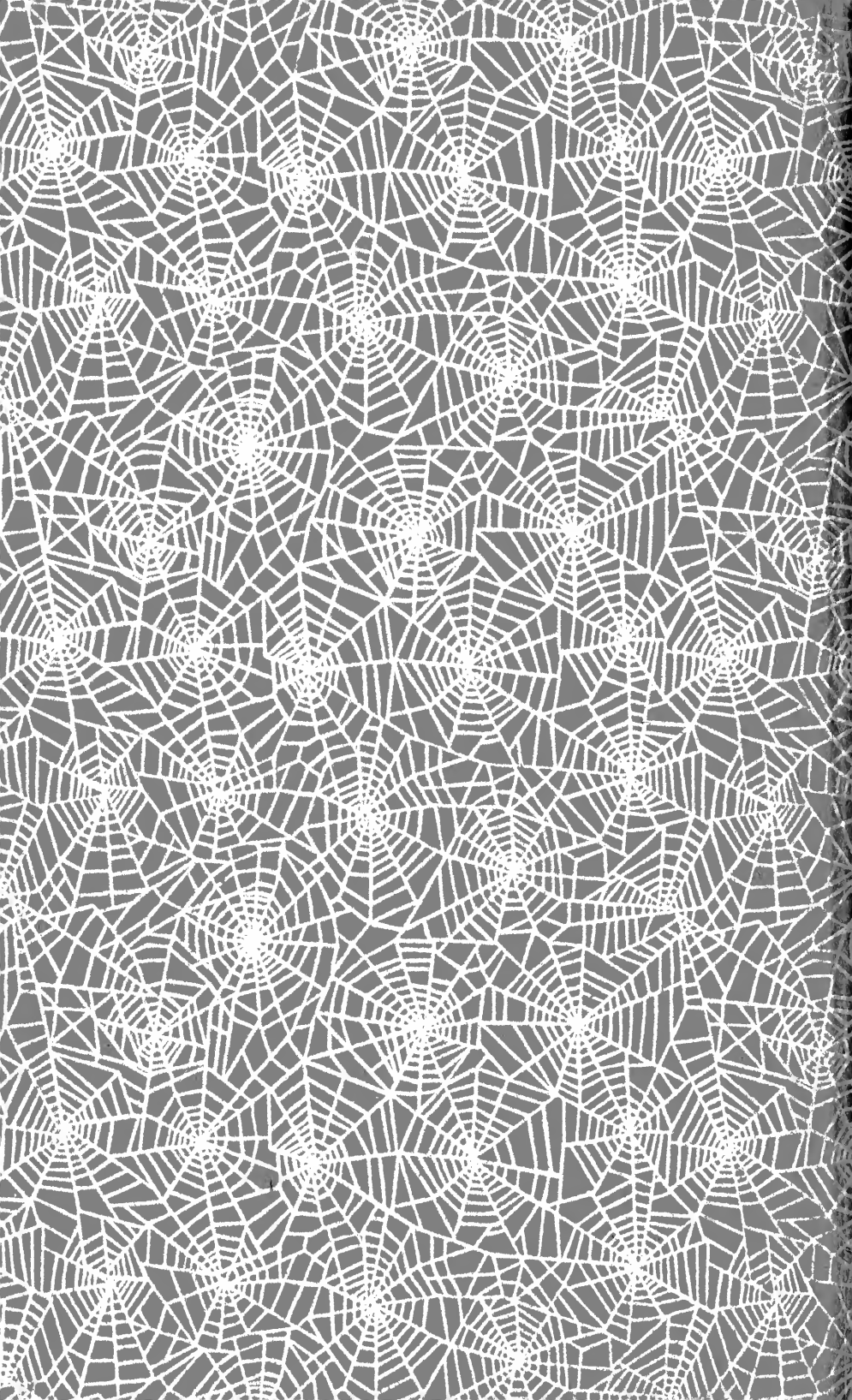
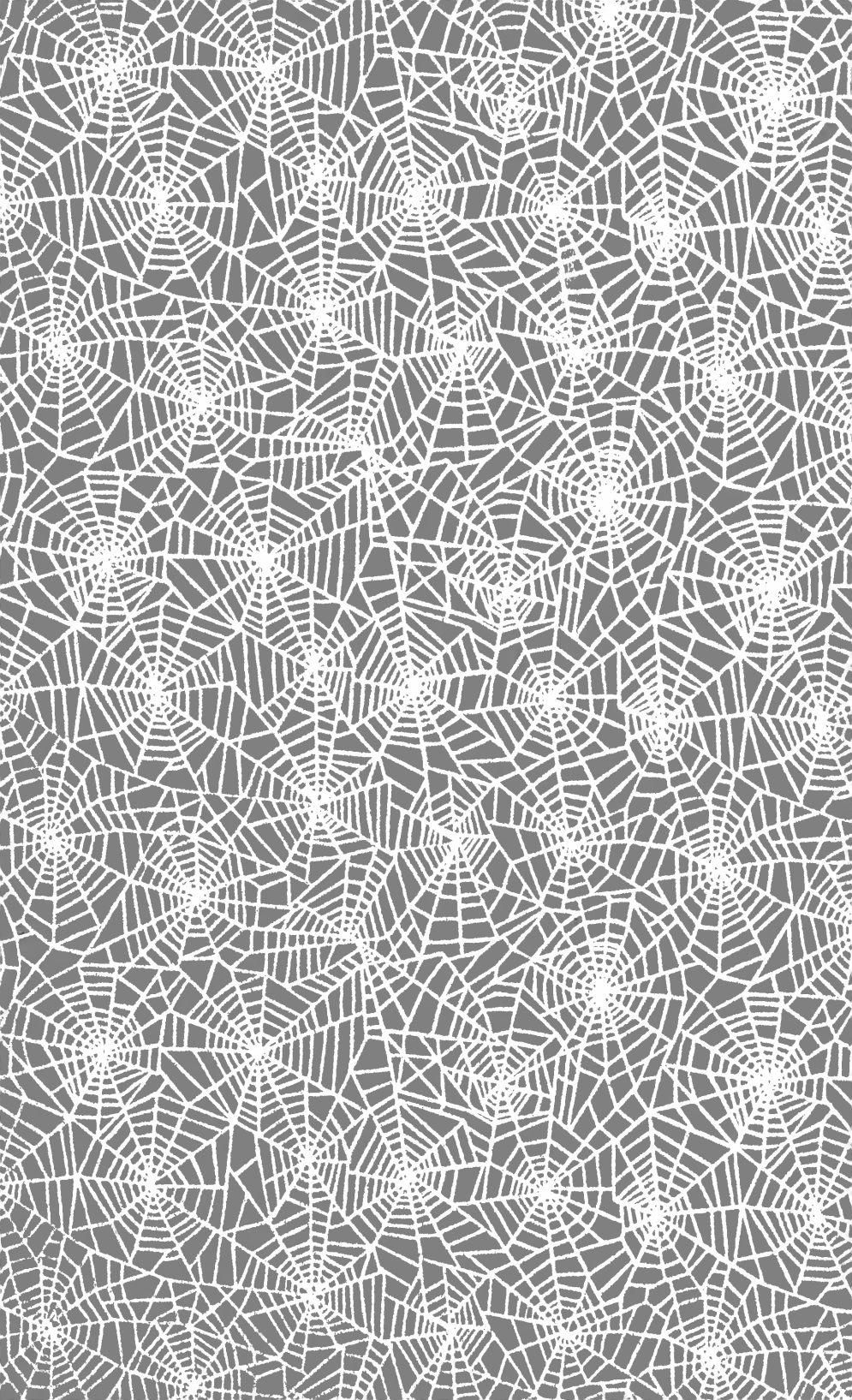


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WEST VIRGINIA UNIVERSITY

The School of

Medicine

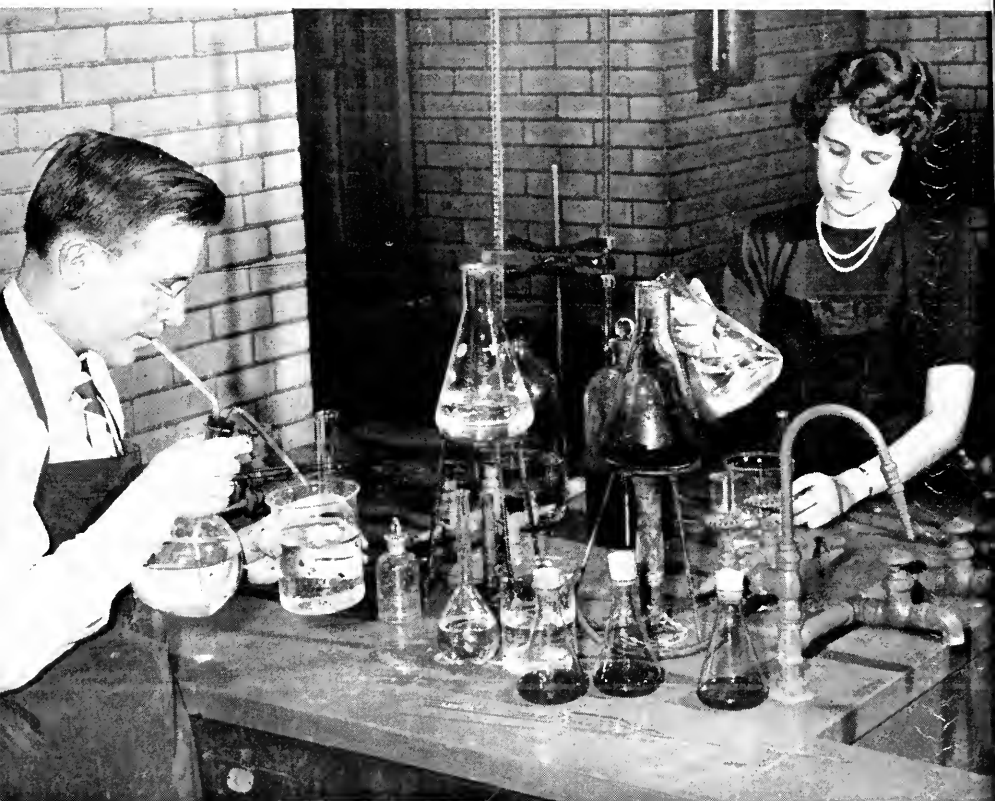
and Curriculum in Medical Technology

ANNOUNCEMENTS OF 1951-52 SESSION

WEST VIRGINIA UNIVERSITY



BULLETIN



WVU STUDENTS get training in well-equipped laboratories

ANNOUNCEMENTS OF

THE SCHOOL OF MEDICINE

1951-52 SESSION



WEST VIRGINIA UNIVERSITY BULLETIN

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WEST VIRGINIA UNIVERSITY

MORGANTOWN

ESTABLISHED FEBRUARY 7, 1867

The Board of Governors

	TERM EXPIRES
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The Board of Governors has charge of the educational, administrative, financial, and business affairs of the University and Potomac State School of West Virginia University.

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Issued Monthly

The School of Medicine

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THE FACULTY

PROFESSORS

- EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920;
Ph.D., University of Chicago, 1927; Litt.D., Medical College of Virginia 1948;
F.A.C.P.
- GIDEON STANHOPE DODDS, *Professor of Histology and Embryology, and Chairman of Committee on Admissions and Scholarship*
B.A., M.A., University of Colorado, 1904, 1905; Ph.D., University of Pennsylvania, 1910.
- ROBE SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1917; Ph.D., University of Chicago, 1923.
- SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
- DAVID FIELDING MARSH, *Professor of Pharmacology*
A.B., West Virginia University, 1939; M.S., Purdue University, 1940; Ph.D., University of California, 1942.
- MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
- DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932, Ph.D., University of Illinois, 1935.
- JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., Ph.D., University of Minnesota, 1936, 1937, 1940.

ASSOCIATE PROFESSORS

- CECIL BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921;
M.D., Western Reserve University, 1923; F.A.C.S.
- JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.

*Part time. In private practice.

- CLARK KENDALL SLEETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
- THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*
B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.
- JOHN CLIFFORD STICKNEY, *Associate Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936, Ph.D., University of Minnesota, 1940.

ASSISTANT PROFESSORS

- GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.
- FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.
- ERNEST HARRY LUDWIG, *Assistant Professor of Bacteriology*
B.S., M.S., Ph.D., University of Pennsylvania, 1937, 1938, 1947.
- CHARLES A. ZELLER, *Assistant Professor of Psychiatry (Superintendent of Weston State Hospital)*
B.S., West Virginia University, 1925; M.D., University of Buffalo, 1927.
- MULLEN O. COOVER, *Assistant Professor of Biochemistry*
A.B., Shepherd State College, 1942; M.S., West Virginia University, 1947; Ph.D., George Washington University, 1950.
- JAMES THOMAS HICKS, *Assistant Professor of Pathology*
A.B., B.S., M.S., University of Pittsburgh, 1945, 1946; Ph.D., George Washington University, 1950.

INSTRUCTORS

- CARL EDWARD JOHNSON,* *Instructor in Medicine (Physical Diagnosis)*
A.B., B.S., West Virginia University, 1923, 1925; M.D. Northwestern University, 1928; F.A.C.P.
- ARCHIE LEMUEL STARKEY, *Instructor in Medicine (Physical Diagnosis) (Superintendent of Hopemont Sanitarium).*
B.S., West Virginia University, 1924, M.D., University of Arkansas, 1937.
- BETTY STONESTREET GILMORE, *Instructor in Biochemistry*
B.S., West Virginia University, 1947.
- WILLIAM SAWYERS HEROLD, *Instructor in Medicine (Physical Diagnosis) and Assistant Physician in Health Service*
A.B., B.S., West Virginia University, 1944, 1945; M.D., Medical College of Virginia, 1946.
- DONALD ATWOOD HERRING, *Instructor in Pharmacology*
B.S. in Pharmacy, Ohio State University, 1941.
- MAYNARD PRIDE,* *Instructor in Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve, 1939.
- WILLIAM AUGUST EHRCOTT,* *Instructor in Pathology*
B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.
- JOHN B. HYDE, *Instructor in Anatomy*
B.S., University of South Dakota, 1944.

ASSISTANTS

- CHARLES MARION CANBY, *Assistant in Bacteriology*
A.B., Shepherd College, 1947; M.S., West Virginia University, 1949.
- LELA VIRGINIA BONNER, *Assistant in Pathology*
B.S., West Virginia University, 1947.

*Part time. In private practice.

VERONICA ARMAGHAN, *Teaching Assistant in Pathology*
A.B., Yankton College, 1927; D.Sc., Johns Hopkins University, 1937.
THOMAS OLIVER WILSON, *Assistant in Anatomy*
B.A., University of Kansas, 1950.
THEODORE ARTHUR TOPPER, *Laboratory Assistant in Biochemistry*

LECTURERS

ELDEN BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.
ROGER A. KENNEDY, *Lecturer in Public Hygiene (Monongalia County Health Officer)*
B.A., M.A., Cambridge University, 1923, 1924; M.D., Saint Thomas Hospital Medical School, London, 1928.

TECHNICIANS

PATRICIA ANN DENNISON, *Technician in Pathology*
B.S., West Virginia University, 1949.
MIRIAM FRIEDMAN NACHMAN, *Technician in Anatomy and Histology*
B.S., West Virginia University, 1940. (Resigned September, 1950).
ALFRED HOWARD, *Animal Caretaker and Technician for the Departments of Physiology and Pharmacology*
B.S., West Virginia University, 1949.
MARGARET FORD GRAY, *Technician in Anatomy and Histology*
B.S., West Virginia University, 1950.

CLERICAL PERSONNEL

VIRGINIA LEE STUMP, *Secretary to the Dean*
LOUISE P. TOOTHMAN, *Secretary of College and Record Clerk*
MARY JO BLAKE, *Secretary in departments of Bacteriology and Pharmacology*
MARGARET BRODERICK, *Secretary in the Department of Pathology*
B.S., West Virginia University, 1946.

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
SAMUEL JOHN MORRIS, *Physician and Medical Adviser to the Department of Athletics*
M.D., University of Maryland, 1912.
WILLIAM SAWYERS HEROLD, *Assistant Physician and Instructor in Medicine*
A.B., B.S., West Virginia University, 1944, 1945; M.D., Medical College of Virginia, 1946.
HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.

NURSES

ROSE MARIE GERARD, R.N., *Nurse in the University Health Service*
ETHEL SMITH HURST, R.N., *Nurse in the University Health Service*
MARY LEE McDONALD, R.N., *Nurse in the University Health Service*

*Part time. In private practice.

BETTY KATHERINE WINKLER, R.N., *Nurse in the University Health Service*
EVALEIGH VIRGINIA FOSTER, R.N., *Nurse in the University Health Service*
HELEN LOUISE KUDLA, R.N., *Nurse in the University Health Service*
IRENE FORBES PREBLE, R.N., *Nurse in the University Health Service*
HELEN VEREB, *Nurses' Aide in the University Health Service*

TECHNICIANS

FABRY LIVINGSTON HAWK, *Chief Technician in the University Health Service*
Registered Medical Technologist.
MARGARET ANNE ALLEN, *Technician in the University Health Service*
B.S., West Virginia University, 1948. (Resigned September, 1950).
ROBERTA BERGER COX, *Technician in the University Health Service*
B.S., West Virginia University, 1950. (Resigned February, 1951).

CLERICAL PERSONNEL

HELEN CLARISSA O'NEILL, *Secretary in the University Health Service*
A.A. Immaculata College, 1936.
ETHEL FEATHIER ELLIS, *Receptionist in the University Health Service*
MARGARET ANNE WALTER, *Clerk in the University Health Service*

THE STANDING COMMITTEES

Executive: E. J. VAN LIERE (*chairman*), G. S. DODDS, F. R. WHITTLESEY, and C. B. PRIDE.
Admissions and Scholarship: G. S. DODDS (*chairman*), S. B. CHANDLER, C. K. SLEETH, and M. L. HOBBS.
Library: S. B. CHANDLER (*chairman*), J. C. STICKNEY, C. K. SLEETH, and J. M. SLACK.
Research, Fellowships, and Grants: D. F. MARSH, (*chairman*), D. W. NORTHUP, M. L. HOBBS, J. M. SLACK, and E. J. VAN LIERE.
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Curriculum: C. K. SLEETH (*chairman*), E. H. LUDWIG, E. J. VAN LIERE, D. F. MARSH.
Student Loans and Scholarships: J. C. STICKNEY (*chairman*), E. J. VAN LIERE, G. S. DODDS, and T. W. WILLIAMS.
Medical Technology: M. L. HOBBS (*chairman*), G. S. DODDS, J. M. SLACK, and E. J. VAN LIERE.
Policy: Heads of departments and the director of the University Health Service.
Graduate Study: J. M. SLACK (*chairman*), D. F. MARSH, and J. C. STICKNEY.

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The School of Medicine as now organized had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no

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provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. Degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. The student's medical fee includes an insurance charge to provide hospitalization for acute illness not to exceed thirty days in a school year. Room charges up to \$5.50 daily and operating room fees are provided for, but professional fees arising out of such hospitalization are not included. All students receive a complete physical examination, including blood tests, urinalysis, and chest X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes five physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for four physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radio-

graphy, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped and operated as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, located at Hopemont, Preston County, 40 miles from Morgantown, is approved by the American Medical Association for residency. It has 450 beds and is a hospital primarily for pulmonary diseases. A substantial number of beds, however, are set aside for purely medical and surgical cases. By a special arrangement between the superintendent and staff of the hospital and West Virginia University, the School of Medicine has access to the hospital for teaching purposes and the superintendent and members of the staff become University officials. This arrangement provides an excellent affiliation for instruction in examination of the sick, with particular reference to pulmonary diseases.

By special arrangements, students of the School of Medicine also have access to clinical facilities of the following institutions for instruction in physical diagnosis, medicine, and surgery: Monongalia General Hospital, with a bed capacity of 100; and Vincent Pallotti Hospital, a private general hospital with a bed capacity of 90.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from Vincent Pallotti Hospital, Monongalia General Hospital, and Hopemont Sanitarium. This arrangement materially augments the pathological museum, which already numbers about 1400 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence, besides assuring authoritative records for medico-legal purposes.

BUILDINGS AND EQUIPMENT

The three-story Medical Building furnishes room for most of the School of Medicine. On the first floor are the offices of the Dean, a general lecture room, a reading and study room, and the pharmacological laboratory. On the second floor are laboratories for bacteriology and physiology. On the third floor are laboratories for gross and microscopic anatomy, a large lecture room, and the X-ray room. All departments have appropriate offices, technical rooms, and storage space. Embalming and cadaver storage rooms are in the basement. Quarters for experimental animals are provided in separate buildings.

The biochemical laboratory occupies rooms in the Chemistry Building. The department office is Room 430; communicating with it are three rooms used as stock and preparation rooms and for research.

The Department of Pathology occupies rooms on the second floor of the University Health Center; a good-sized laboratory-lecture room and the necessary rooms for a museum, preparations, storage, offices, and private laboratories.

LIBRARY

The Medical Library is not organized as a separate unit but is housed in the University Library, where publications of prime importance to the students and faculty of the School of Medicine are to be found in close proximity to related biological and chemical publications. Purely chemical works, many of which are

of interest in medicine, are housed in the Chemistry Building which is adjacent to the Library. Additional current issues of essential medical journals and periodicals of general scientific interest are conveniently available in the students' lounge in the School of Medicine.

There are about 18,000 catalogued volumes in the Library which constitute the medical collection. Roughly half of these are bound volumes of periodicals; the remainder are textbooks and monographs concerned with pre-clinical fields for the most part but comprising also better representative works in internal medicine, surgery, gynecology, obstetrics, public health, hygiene, and history of medicine. Certain other publications are available on bibliofilm, for which reading facilities are offered in the Library and in the Department of Bacteriology. The Library has a subscription list of over 140 leading medical journals. Various departments of the School of Medicine receive a number of special journals, and the Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

The Library maintains an inter-library loan system whereby materials not contained in the Library may be borrowed from the Surgeon General's Library, Library of Congress, or other libraries. Complete sets of various abstracting journals, including the Quarterly Cumulative Index Medicus, may be found in the general reading room of the Library. Library service is available to physicians of the state through loans of publications or through the furnishing of photostatic copies of articles.

A committee from the faculty of the School of Medicine is active in the interests of the Medical Library.

LIVING ACCOMODATIONS

The University maintains three large dormitories, one for men and two for women. Cost of room and board in all dormitories ranges from \$459 to \$549 per academic year of 9 months. The University reserves the right to change these rates as necessity demands. For information as to accommodations and rates, address the office of the Business Director of Residences, West Virginia University, Morgantown.

Medical students, in the main must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the dormitories. For further information concerning houses on the approved list, men should address the Office of Off-Campus Housing, Room 207, Administration Building, West Virginia University, Morgantown. Women should communicate with the office of the Dean of Women, West Virginia University, Morgantown.

COST OF A YEAR'S WORK

Textbooks and supplies will cost you about \$90 to \$150 per academic year. Registration fees for residents are \$258; for nonresidents, \$408 per academic year. There is an annual breakage deposit of \$10, part of which is usually returned at the end of the year. The total legitimate cost of a nine-month session for medical students in residence will range from \$1,000 to \$1,500 exclusive of traveling expenses. The School of Medicine furnishes microscopes for students without charge.

LOANS

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, others available to students of all colleges in the University. For information about loans, inquiries should be made to Director Joseph C. Gluck, Committee on Prizes, Scholarships, and Loan Funds, West Virginia University, Morgantown.

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 P.M. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring Dr. John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association; however, they exceed the minimum standards of those associations.

All applications for admission are passed upon by the Committee on Admissions of the School of Medicine, composed of four members of the medical faculty. Admission is by recommendation of this committee and with the approval of the Dean of the School.

The number of students that can be accommodated is strictly limited. In recent years the number of applicants has been so great that only residents of West Virginia can be considered, and of these only a small percentage can be admitted. Those admitted are the applicants who, in the judgment of the Committee on Admissions, are best qualified for the study of medicine, and who give highest promise of full service in the practice of medicine. Recently the number of applicants has been so great that the School could not accommodate all who were reasonably well qualified.

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must have credit for at least 15 units of high-school work. This must include four units of English,¹ two of mathematics (algebra, one, and plane geometry, one), and other subjects as specified in the general admission requirements of the University. The School of Medicine strongly urges two units of Latin.

COLLEGE CREDITS REQUIRED

The applicant must have credit for at least three years in a college of recognized standing. This credit must total at least 90 semester hours exclusive of military and physical education.

¹Students who present only 3 units of English may satisfy this requirement by making a satisfactory grade on the English Placement Test, or by successfully completing English 1C, English Composition.

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which it approves for premedical education. Medical schools must give preference to applicants from institutions on this list. Schools may accept students from other institutions only when they show evidence of superior ability, as indicated by adequate credits and superior grades. Students planning premedical work should consult the School of Medicine or other authentic source for information about approved colleges.

Credits submitted by applicants for work done elsewhere than in West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The following subjects and hours are the minimum requirements for admission. They must be met in full before enrollment in the School of Medicine.

English, composition and rhetoric 6 hr.
Biological Sciences 12 hr.

Should be mainly zoology and should include an advanced course in comparative anatomy of the vertebrates. Additional work is suggested and should include parasitology (very desirable), genetics and embryology. The following are not acceptable as part of the 12-hour requirement: human anatomy, histology or physiology, or medical bacteriology.

Chemistry 20 hr.

Must include one year of inorganic chemistry (at least 8 hours); 3 hours of quantitative analysis; 3 hours of either physical chemistry or qualitative analysis; and 6 hours of organic chemistry (covering aliphatic and aromatic chemistry. Physiological chemistry is not acceptable as part of the required 20 hours.

Physics 8 hr.

Psychology 3 hr.

A modern foreign language 12 hr.

German or French preferred. Must be in one language. Two units in high school are accepted as 6 hours of the required 12 hours.

Mathematics: College algebra and trigonometry, while not absolute requirements, are looked upon with high favor by the Committee on Admissions. These subjects should be taken in the freshman premedical year because of their great usefulness in the study of physics and chemistry. Analytical geometry and calculus are of advantage to those students who can include them in their program.

Latin: Either high-school or college Latin is strongly urged. It will be of great value.

The premedical student should secure a broad training, including adequate work outside the required scientific fields. The following are recommended as electives: Art (drawing), botany, economics, geology, Greek, history, speech, political science, and sociology.

OTHER ITEMS CONCERNING ELIGIBILITY FOR ADMISSION

Excellence of Premedical Scholarship

The quality of premedical scholarship is the best single criterion of probable success in the study of medicine. For this reason applicants with higher grades are given preference. Students with "average" premedical grades have only a small chance of doing satisfactory work in the School of Medicine even if admitted. An excess of credit hours or higher degrees do little to offset the disadvantage of low grades in securing admission to medical schools.

Medical College Admission Test

The Association of American Medical Colleges sponsors the Medical College Admission Test which is administered by the Educational Testing Service of Princeton, New Jersey. Future tests are announced for Saturday, May 12 and Monday, November 5, 1951. The earlier date is preferable for applicants for 1952. Students must make application to take the test well in advance of these dates. Premedical

advisers will furnish information about applications and testing centers on request. Students with good records in this test have a better chance for admission than those with low scores or those who have not taken the test.

Residence

Preference is given to residents of West Virginia. For several years resident applicants have been so numerous that there have been no places available for nonresidents.

Personal Attributes

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Persons who have been out of college for some years, or who are several years older than the average applicant, are admitted only when they show unmistakable evidence of superior ability and training. Good health is a necessary qualification.

Previous Failures

Applicants who have been subject to suspension from this or other medical schools can be admitted only in exceptional cases, when the Committee on Admissions considers such readmission justified.

When to Apply for Admission

Application for admission in September 1952 should be made promptly upon completion of the school year 1950-51 (June 1951). Applications will be considered until the class is filled, but early application is advantageous.

How to Apply for Admission

Application for admission must be made upon blanks which may be obtained from the Dean's office upon request. A small unmounted photograph must accompany the application.

Credentials

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the School of Medicine, an official transcript of his work. (The University cannot accept transcripts sent by the applicant himself.) Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the School of Medicine.

Recommendations

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, two instructors in different science departments to send letters of recommendation to the School of Medicine.

Notification of Applicants

All applicants will be informed of the action of the Committee on Admissions as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

PREMEDICAL CURRICULA

In keeping with the need for good premedical training, West Virginia University, through its premedical adviser, maintains careful supervision over those students who have declared their intention of preparing for the study of medicine. It is not the policy of West Virginia University to give special premedical courses but rather to maintain a well-balanced curriculum composed of courses regularly scheduled in various departmental offerings.

This curriculum does not involve extensive specialization in any subject. There are no majors and minors. High specialization in one subject probably is not the best preparation for the average student. The curriculum includes as re-

quirements those subjects which are needed for entrance to medical schools, but it also allows wide latitude in choice of electives in other departments so that the student may gain some insight into the various fields of knowledge in which all educated persons should be versed.

Another premedical curriculum is offered by the College of Pharmacy which enables students to prepare for entrance to the School of Medicine during three years in the College of Pharmacy. At the end of two years in the School of Medicine, the student receives the B.S. Degree in Pharmacy. For information concerning this course, inquiries should be addressed to Dean of the College of Pharmacy, West Virginia University, Morgantown, West Virginia.

REGISTRATION

Persons who are not registered as students in the University and who are not members of the administrative or teaching staffs shall not be admitted to regular attendance in School of Medicine classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Scholarship Committee and the professor in charge of the course.

All medical students are expected to register at the Medical Building on the days set apart for registration at the beginning of each semester as announced in the calendar on page 30 of the bulletin.

No student will be permitted to register in the School of Medicine after the first week of classes.

DEPARTURE FROM SCHEDULED WORK

Students must register for all prescribed courses for each semester except by special permission from the Scholarship Committee of the School of Medicine. This permission is not valid until it has been reported to the Registrar for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw during the term should do so in regular manner. Consult the Dean's office for steps which must be taken.

FEES

All fees are due and payable at the office of the Comptroller on the day of registration.² Students registering in the School of Medicine pay the following:

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of registration in the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant. The deposit paid by students under the G.I. Bill of Rights will be refunded after the full tuition for the semester has been paid.

²Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

TUITION AND OTHER FEES

	Residents ⁴	Non-Residents ⁴
Full-time students ³ (per semester) Tuition	\$ 87.00	\$162.00
University Fees	42.00	42.00
Total	\$129.00	\$204.00
Part-time students (per semester hour) ⁵	8.00	12.50
Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4 per credit hour in addition to the fee charged in the college or school in which they are registered.		
Breakage deposit (for year)		\$ 10.00
Breakage deposit for University students not regularly enrolled in medical school, for one laboratory course, \$5, and for more than one course, \$10.		

SPECIAL FEES

Late registration ⁵	\$ 2.00
Graduation fee ⁶	10.00
Student's record fee ⁷	1.00

REFUNDING OF FEES

Fees will be refunded according to the following schedule to students who withdraw regularly from the University.

	Amount of Refund
During the first and second weeks	All fees less \$3.00
During the third and fourth weeks	80% of fees
During the fifth and sixth weeks	60% of fees
During the seventh and eighth weeks	40% of fees
Beginning with ninth week	No refunds allowed

STANDARDS OF SCHOLARSHIP

MARKING SYSTEM

- A—excellent—given only to students of superior ability and attainment
- B—good—given to those students who are well above average but who are not in the highest group
- C—fair—average students
- D—poor but passing
- I—incomplete
- F—failure
- W—all withdrawals prior to end of second week following date for mid-semester reports
- WP—withdrew passing
- WF—withdrew failing
- FIW—failure because of irregular withdrawal

³A full-time student is one who is registered for 10 or more semester hours during a semester. A part-time student is one who is registered for fewer than 10 semester hours per semester.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding his registration. No nonresident student may establish domicile in this State, entitling him to reductions or exemptions of tuition, merely by his attendance at the University. A minor student whose parents have become domiciled in West Virginia after the student's original registration in the University will be deemed to have the domicile of his parents and be

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF," "FIW"—0. When the grade of "I" becomes converted into a grade carrying credit, the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Scholarship. (University Rule.)

For Medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Scholarship Committee.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

PROMOTIONS AND SUSPENSIONS

The Committee on Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The applications of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Scholarship Committee.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended.
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

entitled to pay resident fees thereafter. Moreover, any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State, at least twelve months prior to his reregistration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

⁵Charged to students who do not procure class cards during the regular registration days set forth in the calendar on page 30.

⁶The graduation fee is payable by all students at the beginning of the semester or term in which they expect to receive their degrees or diplomas.

⁷One transcript of a student's record is furnished by the Registrar without charge. This fee is charged for furnishing an additional transcript.

SCHEDULE OF COURSES FOR 1951-52

COURSE	HR. PER WEEK			HR. PER SEMESTER			SEMESTER HOURS* CREDIT
	Lect	Lab.	Total	Lect	Lab.	Total	

FIRST YEAR — FIRST SEMESTER

Gross Anatomy 201	2	8	10	32	128	160	6
Histology 211	3	9	12	48	144	192	6
Biochemistry 231	4	9	13	64	144	208	7

FIRST YEAR — SECOND SEMESTER

Gross Anatomy 202	2	6	8	32	96	128	4
Neuroanatomy 203	2	6	8	32	96	128	4
Embryology 212	2	0	2	32	0	32	2
Medical Bacteriology 221	3	9	12	48	144	192	6
Physiology 242	2	3	5	32	48	80	3

SECOND YEAR — FIRST SEMESTER

Hygiene 222	2	0	2	32	0	32	2
Physiology 243	5	6	11	80	96	176	7
Gen. and Tumor Pathology 251	5	9	14	80	144	224	7
Pharmacodynamics 262	3	0	3	48	0	48	3
Physical Diagnosis 271	1	0	1	16	0	16	*
Introductory Medicine 272	0	2	2	0	32	32	*
Psychobiology 273	1	0	1	16	0	16	1
Biostatistics 274	1	0	1	16	0	16	1

SECOND YEAR — SECOND SEMESTER, FIRST HALF

Applied Anatomy 204	2	4	6	16	32	48	2†
Special Pathology 252	1	2	3	8	16	24	§
Clinical Pathology 254	2	4	6	16	32	48	§
Medical Pharmacology 263	4	6	10	32	48	80	§
Physical Diagnosis 271	1	2	3	8	16	24	§
Introductory Medicine 272	2	0	2	16	0	16	§
History of Medicine 275	1	0	1	8	0	8	0
Surgery, Principles of 281	2	0	2	16	0	16	§
Obstetrics 291	2	0	2	16	0	16	§

SECOND YEAR — SECOND SEMESTER, SECOND HALF

Special Pathology 252	2	2	4	16	16	32	2
Clinical Pathology 254	3	7	10	24	56	80	3
Medical Pharmacology 263	3	5	6	24	24	48	4
Clinical Anesthesiology 264	1	0	1	8	0	8	0
Physical Diagnosis 271	2	2	4	16	16	32	3
Introductory Medicine 272	2	2	4	16	16	32	3
History of Medicine 275	1	0	1	4	0	4	0
Surgery, Principles of 281	2	2	4	16	16	32	2
Obstetrics 291	2	0	2	16	0	16	2

*Course continues throughout the year.

†Course completed at mid-semester.

§Course continues throughout the semester.

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

9	10	11	12	1	2	3	4	5
Biochemistry					Histology			
Gross Anatomy					Histology			
Biochemistry					Gross Anatomy			
Gross Anatomy		Biochem.			Histology			
Biochemistry					Histology			

FIRST YEAR—SECOND SEMESTER

9	10	11	12	1	2	3	4	5
Neuroanatomy					Bacteriology			
Emby. G. Anatomy		Neuro.			Physiology			
Neuroanatomy		Physiol.			Bacteriology			
Emby. G. Anatomy					Bacteriology			
Gross Anatomy		Physiol.			Bacteriology			

SECOND YEAR—FIRST SEMESTER

9	10	11	12	1	2	3	4	5
Pharm. Physiol. Medicine					Pathology			
Pathology		Physiol.			Physiology			
Pathology		Hygiene Physiol.			Pathology			
Pharm. Physiol. Biostat. or Psycho.					Physiology			
Pharm. Phys. Diag Hygiene Physiol.					Pathology			

SECOND YEAR—SECOND SEMESTER, FIRST HALF

9	10	11	12	1	2	3	4	5
Pharm. Obstetrics	Cl. Path.	Phys. Diag.			Pharmacology			
Pharm. Medicine	Hist. Med.	Surgery			Applied Anatomy			
Medicine Pharm.	Clinical Pathology				Pharmacology			
Pharm. Cl. Path.	Obstet. Surgery				Applied Anatomy			
Physical Diagnosis	Clinical Pathology				Pathology			

SECOND YEAR—SECOND SEMESTER, SECOND HALF

9	10	11	12	1	2	3	4	5
Medicine or Surgery	Cl. Path.	Obstet.			Pathology	Hist. Med.	Anesth.	
Medicine or Surgery	Pharm.	Surgery			Clinical Pathology			
Medicine Phys. Diag.	Pathology				Pharmacology			
Medicine Phys. Diag	Pharm.	Surgery			Clinical Pathology			
Physical Diagnosis	Pharm.	Obstet.			Clinical Pathology			

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia, as noted on page 7.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. Medical students may work toward this degree by study during four summer terms (two full summers.) For fuller information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements of the Graduate School*.

Only a small number of graduate students can be accommodated in departments of the School of Medicine. Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

COURSES OF INSTRUCTION

For convenience each course is designated by the name of the department and the number of the course. The plan for numbering courses in West Virginia University is as follows:

Courses 1 to 99—courses primarily for freshmen and sophomores.

Courses 100 to 199—courses open to juniors and seniors.

Courses 200 to 299—advanced courses for juniors, seniors, and graduates.

Courses 300 to 399—courses open to graduates only.

The following abbreviations are used in the announcements of courses:

I—a course offered during the first semester.

II—a course offered during the second semester.

I, II—a semester course offered each semester.

Yr.—a continuous course extending through two semesters.

S—a course offered during the summer terms.

hr.—number of semester hours credit per course.

Conc.—concurrent.

NOTE—Courses marked “*” are required of first-year students; those marked “†” are required of second-year students.

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information see *Announcements of the Graduate School*.

ANATOMY

GROSS ANATOMY AND NEUROANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructor HYDE; Assistant WILSON

201.* GROSS ANATOMY. I. 6 hr. PR: Zoology 2, Zoology 231 (Comp. Anatomy) desirable. Lecture, 2 hr. per week; lab., 8 hr.

202.* GROSS ANATOMY. II. 4 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 2 hr. per week; lab., 6 hr.

203.* NEUROANATOMY. II. 4 hr. PR: Histology 211; Anatomy 201. Lecture, 2 hr. per week; lab., 6 hr.

- 204.† APPLIED ANATOMY. II. 2 hr. PR: Anatomy 201, 202, 203, and Embryology 212. Lecture, 2 hr. per week; lab., 4 hr. during first half of semester.
206. ANATOMY OF THE SYMPATHETIC NERVOUS SYSTEM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
207. APPLIED ANATOMY OF THE PELVIS AND PERINEUM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
301. ADVANCED ANATOMY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

HISTOLOGY AND EMBRYOLOGY

Professor DODDS; Associate Professor WILLIAMS; Assistant WILSON

- 211.* HISTOLOGY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. Histological structure and elementary embryology of tissues and organs. Lecture, 3 hr. per week; lab., 9 hr.
- 212.* HUMAN EMBRYOLOGY. II. 2 hr. PR: Histology 211 and Anatomy 201 (Human Anatomy). Comprehensive survey of human development in relation to gross and microscopic structure. Lecture, 2 hr. per week.
216. THE HISTOLOGY AND DEVELOPMENT OF THE SKELETAL SYSTEM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students. Laboratory work and study of current literature.
217. ADVANCED EMBRYOLOGY. I or II. 2-5 hr. Topics to be chosen to meet special needs of students. Hours to be arranged. Open to properly qualified students.
311. RESEARCH IN MICROSCOPIC OR DEVELOPMENTAL ANATOMY. I or II or Yr. 2-5 hr. Hours to be arranged. Open to properly qualified students.

BACTERIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professor LUDWIG; Assistant CANBY; Lecturer KENNEDY

220. PATHOGENIC BACTERIOLOGY. I, S. 5 hr. PR or Conc.: Chemistry 131 (Organic Chemistry). For students in Medical Technology and Pharmacy. Detailed study of microorganisms with emphasis on those causing human diseases. Lecture, 2 hr. per week; lab., 8 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.* MEDICAL BACTERIOLOGY. II. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry), Biochemistry 231 desirable. Detailed study of pathogenic microorganisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr.
- 222.* PUBLIC HYGIENE. I. 2 hr. PR: Consent of instructor. Introduction into the principles of public health. Lecture 2 hr. per week.
224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.
- 320, 321. ADVANCED BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsia, and viruses. Graduate students only.

- 323, 324, 325, 326. RESEARCH IN BACTERIOLOGY. I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Assistant Professor COOVER; Instructor GILMORE; Laboratory Assistant TOPPER

139. or 239. GENERAL BIOCHEMISTRY. II. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics and Medical Technology. Open to other qualified students. Graduate students required to do 1 hr. additional work per week for 4 hr. credit.
- 231.* BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab., 9 hr.
237. SEMINAR IN BIOCHEMISTRY. Yr. 2 hr. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.
- 330, 331. ADVANCED BIOCHEMISTRY. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.
- 333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

- 275.† HISTORY OF MEDICINE. II. No Credit. A brief history of the development of the science and art of medicine. Lecture, 2 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, and ZELLER; Instructors JOHNSON, HEROLD, and STARKEY

- 271.† PHYSICAL DIAGNOSIS. Yr. 3 hr. Lecture, 1 hr. per week during first semester; lecture, 1 hr. per week, lab., 2 hr. during first half of second semester; lecture, 2 hr. per week, practical work with patients. 2 hr. during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 272.† INTRODUCTORY MEDICINE. Yr. 3 hr. Medical clinic—demonstration of clinical cases, 2 hr. per week during first semester; lecture, 2 hr. per week during first half of second semester; lecture, 2 hr. demonstration of clinical cases, 2 hr. per week during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 273.† PSYCHOBIOLOGY. I. 1 hr. Introduction to the study of human personality, normal and abnormal. Lecture, 1 hr. per week.
- 274.† BIostatISTICS. I. 1 hr. Planned to aid in the understanding of the statistical methods commonly used in medical and biological work, and in the evaluation of experimental data in these fields. Lecture, 1 hr. per week.

OBSTETRICS

Professor VAN LIERE

- 291.† OBSTETRICS. I. 2 hr. PR: Anatomy 201, 202 (Human anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor HICKS; Instructor EHIGOTT; Assistant BONNER;
Teaching Assistant ARMAGHAN

151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab., 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† GENERAL AND TUMOR PATHOLOGY. I. 7 hr. PR. approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† SPECIAL PATHOLOGY. II. 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture, 2 hr. per week, lab., 2 hr. during second half of semester.
- 254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.
256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor MARSH; Instructor HERRING; Lecturer TUCKER

160. FUNDAMENTALS OF PHARMACOLOGY. II. 1 hr. PR or conc.: Physiology 141. For students in the College of Pharmacy. Lecture 1 hour per week.
161. PRACTICAL PHARMACOLOGY. I. 4 hr. PR: Pharmacology 160. For students in the College of Pharmacy. Lecture 3 hours per week; lab., 3 hours.
- 262.† PHARMACODYNAMICS. I. 3 hr. PR: Physiology 141 or 242. Lecture, 3 hr. per week. The mechanism of action of drugs on living things. The fundamental relationships between drugs and drug action.
- 263.† MEDICAL PHARMACOLOGY. II. 4 hr. PR: Pharmacology 262. Lecture, 4 hr. per week, lab., 6 hr. first half of semester; lecture, 3 hr. per week, lab., 3 hr. second half of semester. The action of drugs commonly used clinically for man and animals.
- 264.† CLINICAL ANESTHESIOLOGY. II. No credit. PR: registration in Pharmacology 263. 1 hr. per week second half of semester. Practical demonstrations of anesthesia.
266. BIOCHEMOPHYSIOLOGY. II. 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 211; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.

- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. ANESTHESIOLOGY. I, II, S. 3 hr. PR: Physiology 243. Production of surgical anesthesia in man. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP and VAN LIERE; Associate Professor STICKNEY

141. ELEMENTARY PHYSIOLOGY. II. 4 hr. PR: Biology 1, 2 or Zoology 1, 2, Chemistry 131 (Organic Chemistry) (or Conc.) For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr.
- 242.* PHYSIOLOGY. II. 3 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology of muscle and nervous system. Lecture, 2 hr. per week; lab., 3 hr.
- 243.† PHYSIOLOGY. I. 7 hr. PR: same as for Physiology 242. Physiology of circulation, respiration, digestion, metabolism, secretion, endocrines, special senses. Lecture, 5 hr. per week; lab., 6 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE

- 281.† PRINCIPLES OF SURGERY. II. 2 hr. Lecture, 2 hr. per week during the first half of semester; lecture, 2 hr. per week during second half of semester, demonstrations of clinical cases and operative technique, 2 hr.

MEDICAL STUDENTS 1950-1951

FIRST-YEAR STUDENTS (ENTERED SEPTEMBER 18, 1950)

Argiro, Thomas Robert (A.B., West Virginia U., 1948).....	Fairmont
Beale, Kenneth Neil (B.S., Fairmont State College, 1949).....	Fairmont
Bogarat, Irwin Mendel (A.B., West Virginia U., 1950).....	Weirton
Busch, Gail William (B.S., Davis and Elkins College, 1950).....	Elkins
Ciccarelli, Harold Edward (A.B., M.S., West Virginia U., 1949, 1950).....	Chester
Cooke, Charles Robert (A.B., West Virginia U., 1950).....	Oak Hill
Dewhurst, William Harvey (B.S., Marshall College, 1950).....	Huntington
Douthat, Rudenz Thomas (A.B., University of Michigan, 1950).....	Huntington
Felton, Harold William (A.B., West Virginia U., 1950).....	Rowlesburg
Fineman, Joseph Enoch (A.B., West Virginia U., 1950).....	Chester
Fox, Lewis Nevin.....	Prenter
Gialamas, Antonio.....	Weirton
Harriman, William Henry, Jr. (A.B., West Virginia U., 1949).....	Terra Alta
Harris, Jimmie Lee (A.B., West Virginia U., 1950).....	Alderson
Hatten, Donald Franklin.....	Kenova
Hoffman, Charles Anthony (B.S., Hampden-Sydney College, 1950).....	Huntington
Lively, Charles Thomas (A.B., West Virginia U., 1950).....	Charleston
Long, Thomas Porter (B.S., West Virginia Wesleyan College, 1949).....	Lindside
McCreary, Patricia Ann (A.B., West Virginia U., 1950).....	Wellsburg
McKenzie, James Vincent (B.S., Marshall College, 1949).....	Quinwood
McLean, William David (B.S., Hampden-Sydney College, 1950).....	Beckley
Markey, John B. (A.B., West Virginia U., 1950).....	Sharples
Martin, Gilbert Adrian, Jr.....	Fairmont
Pelzel, Robert Burry (A.B., West Virginia U., 1947).....	Charleston
Richter, Betty Jane (A.B., West Virginia U., 1950).....	Morgantown
Rickard, William Garrett (A.B., Berea College, 1949).....	Oak Hill
Ryburn, Samuel Benjamin (B.S., Hampden-Sydney College, 1950).....	S. Charleston
Smith, David Dawson (B.S., West Virginia Wesleyan College, 1949).....	Logan
Smith, Emma Jane (A.B., West Virginia U., 1950).....	Lost Creek
Van Winkle, Glenn Frederick (B.S., Marshall College, 1949).....	Charleston
Yoho, Alan Verl.....	Grafton

SECOND-YEAR STUDENTS (ENTERED SEPTEMBER 19, 1949)

Beach, James Gordon, Jr. (A.B., West Virginia U., 1949).....	Gary
Bond, William Foster (B.S., United States Naval Academy, 1943).....	Montgomery
Brancazio, Dominic Anthony (A.B., West Virginia U., 1950).....	Weirton
Brown, Mary Dorcas (B.S., West Virginia Wesleyan College, 1946).....	Buckhannon
Collins, Haydn Brian (A.B., West Virginia U., 1949).....	Morgantown
Cunningham, Donald Edward (A.B., West Virginia U., 1948).....	St. Albans
Davis, Charles Joseph, Jr. (A.B., West Virginia U., 1950).....	Nitro
Davis, Edwin Dyer.....	Clendenin
Duncan, Laurence Lee (A.B., West Virginia Institute of Technology, 1950)...	Charleston
Hamilton, James William (A.B., West Virginia U., 1949).....	Fairmont
Haynes, William Ned (A.B., West Virginia U., 1949).....	Welch
Hodges, Frank Vernon (B.S., Concord College, 1950).....	Bluefield
Howes, Robert Winfield, Jr. (B.S., West Virginia Wesleyan College, 1949)...	Parkersburg
Irons, Raymond Jack.....	Ronceverte
Kendall, Ralph Lee (B.S., Davis and Elkins College, 1949).....	Elkins
McCarty, George Eugene (B.S., Salem College, 1949).....	Salem
McCoy, Arch Thomas (A.B., West Virginia U., 1950).....	Peterstown
McDonald, Robert Melvin (B.S., West Virginia Wesleyan College, 1949).....	Oak Hill
Moore, James Edward, Jr. (B.S., Marshall College, 1948).....	Huntington
Naymick, George.....	Morgantown
Sanders, Arthur (A.B., West Virginia U., 1948).....	Charleston
Shipper, John Calvin (A.B., Western Michigan College, 1948).....	Martinsburg
Wiley, James Hugh (A.B., West Virginia U., 1950).....	Logan
Withers, Donald Erwin (A.B., Duke University, 1949).....	Fairmont
Young, Mattie Louise (A.B., West Virginia U., 1950).....	Charleston

II. Curriculum in Medical Technology

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, etc., and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association, which inspects, evaluates, and approves schools. This School is included in the list of those approved by the American Medical Association. In this field, properly qualified persons, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

During the first two years the student is registered in the College of Arts and Sciences and is under supervision of the premedical adviser. These two years are considered as preliminary training.

The third and fourth years include specialized and technical training of the curriculum. During these years the student is under jurisdiction of the School of Medicine. These students are not to be regarded, however, as medical students, nor can any course taken during these years be counted toward the M.D. Degree.

Work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*.

G. S. DODDS (Chairman of Committee on Admissions and Scholarships).

JOHN M. SLACK (Associate Professor of Bacteriology and Public Hygiene).

E. J. VAN LIERE (Dean of Medical School).

ADMISSION REQUIREMENTS

- (a) Admission requirements for the first year (pretechnology) are the same as for the College of Arts and Sciences, namely, 15 units of high-school work, including subjects specified in the *University Catalog*. Two units of mathematics are very desirable.
- (b) For admission to the third year, students must complete the first two years of the curriculum outlined below in West Virginia University, or an equivalent program in other institutions of recognized standing.
- (c) Only a limited number of students can be accommodated in the third and fourth years. Preference is given to residents of West Virginia. Application should be made on forms obtainable from the School of Medicine and must be presented at the office of the Dean of the School. Applications should be made in February and will be considered after April 1. Admission is on recommendation of the Committee on Medical Technology and with approval of the Dean of the School of Medicine.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

FEES

For the first two years students pay the regular fees for students in College of Arts and Sciences. In the last two years, while students are under the jurisdiction of the School of Medicine, there is an additional tuition fee of \$25 per semester. For the summer term of the fourth year the fee is \$5 for residents and \$7 for non-residents. There is a breakage deposit of \$10 per year. The Graduation Fee of \$10 is due at the beginning of the last semester. Students not registered in the School of Medicine or the the College of Pharmacy pay \$4 per semester hour for courses given by the medical school faculty, in addition to the regular fee for the college in which they are registered.

STANDARDS OF SCHOLARSHIP

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year with a grade-point average of 1.5 per registration hour.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

THE CURRICULUM

During the first two years the student is registered in the College of Arts and Sciences.

FIRST YEAR (PRETECHNOLOGY)

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Inorganic chemistry 1	4	Inorganic chemistry 2	4
General zoology 1	4	General zoology 2	4
English composition 1	3	English composition 2	3
Modern foreign language	3	Modern foreign language	3
Electives	2	Electives	2
Physical education	1	Physical Education	1

SECOND YEAR (PRETECHNOLOGY)

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Qualitative analysis 5	4	Quantitative analysis 15	3
English literature	3	English literature	3
Modern foreign language	3	Modern foreign language	3
General physics 1, 3	4	General physics 2, 4	4
Electives	2	Electives	2
Physical education	1	Physical education	1

NOTE: In addition to the courses listed above, male students must take military or air science to meet University requirements.

THIRD YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Pathogenic bacteriology 220	5	Elementary physiology 141	4
Organic chemistry 131	4	General biochemistry 139	4
Comparative anatomy 231	5	Parasitology 120	4
Electives	3	Clinical laboratory diagnostic methods 151	4

FOURTH YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygiene Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.,
110. RECORD KEEPING. Yr. 2 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

STUDENTS IN MEDICAL TECHNOLOGY

THIRD YEAR

Ashworth, Martha	Moundsville
Bays, Robert Clowney	Russellville
Bishop, Georgia Jean	Oak Hill
Cook, Helen Lindsay	Morgantown
Edwards, Jean Wood	Jaeger
Godby, Robert Lee	Oak Hill
Hill, Ann Wagner	Romney
Hope, Harley Franklin	Matewan
Huey, Peggy Louise	Mannington
Marra, Theresa Ann	Morgantown
O'Connor, Patricia Louise	Keyser
Orr, Helen Patricia	Grafton
Runco, Carmen Elizabeth	Wheeling

FOURTH YEAR

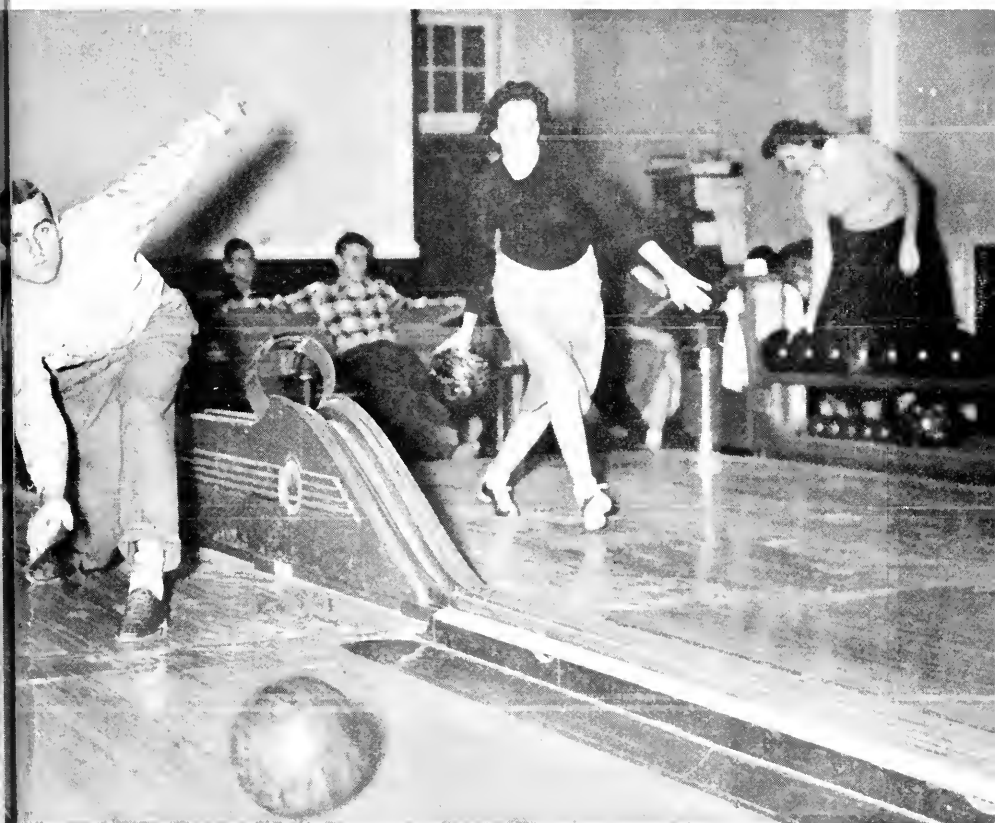
Cappellanti, Lenora Donna	Morgantown
Dyer, Dorothy Lucile	Charleston
Eakle, Allan Fairfax	Clay
Goss, Patricia Ann	Wheeling
Griffith, Ruth Ramona	Beckley
Hammond, Jimmie Boreman	Pennsboro
Horter, Mary Lou	Wheeling
Proudfoot, Alice Marie	Rowlesburg
Starr, Mary Louise	Morgantown
Sutherland, Tommy June	Bluefield
Westfall, Patricia Gae	Grantsville
Zinn, Jessie Ruth	Wheeling

(See pages 30-1 for calendars)









STUDENTS go to Mountainlair to play games and relax



WVU STUDENTS have access to 233,000-volume Library

WEST VIRGINIA UNIVERSITY

The School of

Medicine

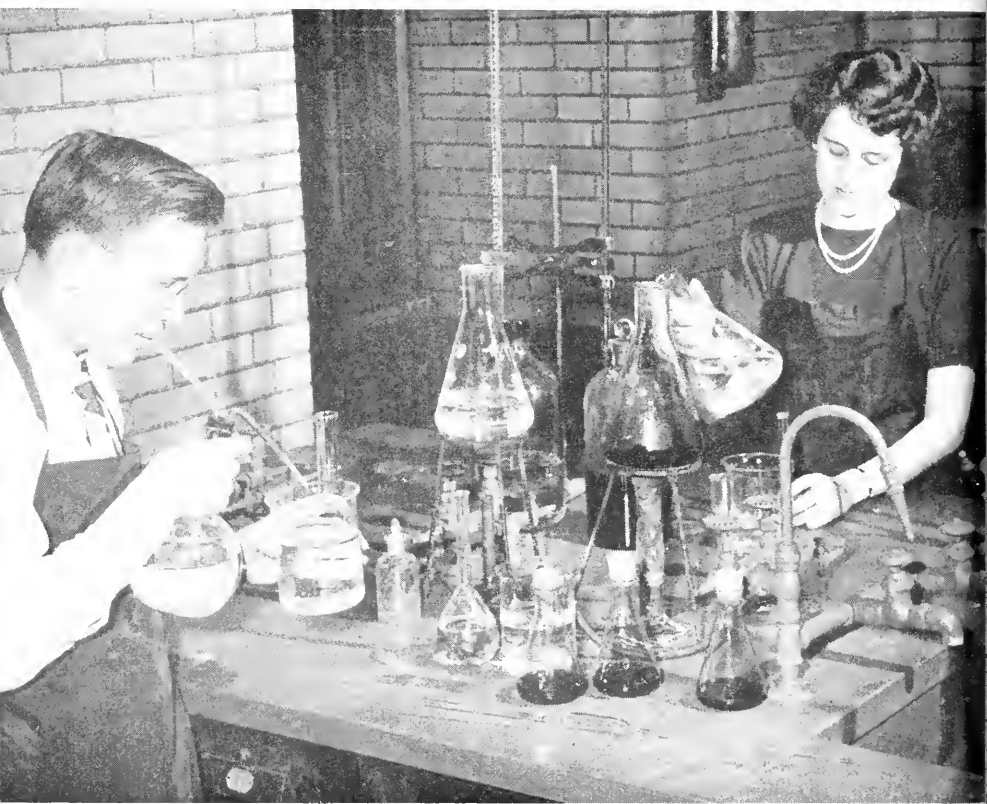
and Curriculum in Medical Technology

ANNOUNCEMENTS OF 1952-53 SESSION

WEST VIRGINIA UNIVERSITY



BULLETIN



WVU STUDENTS get training in well-equipped laboratories

ANNOUNCEMENTS OF

THE SCHOOL OF MEDICINE

1952-53 SESSION



WEST VIRGINIA UNIVERSITY BULLETIN

YEAR 1952

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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30	31																											

MAY							JUNE							JULY							AUGUST							
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25	26	27	28	29	30	31		29	30						27	28	29	30	31			24	25	26	27	28	29	30
																						31						

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER									
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S			
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14	15	16	17	18	19	20		12	13	14	15	16	17	18	16	17	18	19	20	21	22	14	15	16	17	18	19	20	21	
21	22	23	24	25	26	27		19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	28	
28	29	30						26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31					
															30															

YEAR 1953

JANUARY							FEBRUARY							MARCH							APRIL							
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25	26	27	28	29	30	31	29	30	31					29	30	31												
MAY							JUNE							JULY							AUGUST							
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17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29	
31																					30	31						
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
					1	2						1	2	3	1	2	3	4	5	6	7					1	2	
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14	15	16	17	18	19	10	11	
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	29	30	31					
27	28	29	30				25	26	27	28	29	30	31	29	30													

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold-face type.

UNIVERSITY CALENDAR

1952

May 31, Saturday	Alumni Day
June 1, Sunday	Baccalaureate Exercises
June 2, Monday	Commencement Day
June 4, Wednesday	Registration for first term, Summer Session
June 5, Thursday	First classes, first term, Summer Session
July 4, Friday	Independence Day, a holiday
July 15, Tuesday	Close of first term, Summer Session
July 16, Wednesday	Registration for second term, Summer Session
July 17, Thursday	First classes, second term, Summer Session
August 22, Friday	Close of Summer Session*
September 10, Wednesday to September 16, Tuesday	Freshman Week Program
September 15 and 16, Monday and Tuesday	Registration for first semester
September 17, Wednesday	First classes, first semester
October 14, Tuesday	Meeting of University Senate
November 4, Tuesday	Election Day, a holiday
November 10, Monday	Midsemester reports due
November 27, Thursday	Thanksgiving Day, a holiday
December 20, Saturday, to January 4, Sunday, inclusive	Christmas recess

1953

January 19, Monday, to January 24, Saturday, inclusive	Final examinations for first semester
February 2, Monday and February 3, Tuesday	Registration for second semester
February 4, Wednesday	First classes, second semester
February 7, Saturday	West Virginia University Day
February 10, Tuesday	Meeting of University Senate
March 30, Monday	Midsemester reports due
April 3, Friday to April 7, Tuesday, inclusive	Easter recess
May 12, Tuesday	Meeting of University Senate
May 23, Saturday to May 29, Friday	Final Examinations for second semester
May 30, Saturday	Alumni Day
May 31, Sunday	Baccalaureate Exercises
June 1, Monday	Commencement Day

* Classes will be held August 9 and 16.

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WEST VIRGINIA UNIVERSITY

MORGANTOWN

ESTABLISHED FEBRUARY 7, 1867

The Board of Governors

	TERM EXPIRES
E. G. OTEY, <i>President</i> , Montgomery	1959
K. DOUGLAS BOWERS, <i>Vice-President</i> , Beckley	1953
A. C. SPURR, Fairmont	1952
CHARLES E. HODGES, Charleston	1954
WILLIAM G. THOMPSON, Montgomery	1955
RAYMOND E. SALVATI, Huntington	1956
THOMAS E. MILLSOP, Weirton	1957
MRS. PAUL HAMMANN, Martinsburg	1958
THOMAS L. HARRIS, Parkersburg	1960
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	
CHARLES T. NEFF, JR., <i>Executive Secretary</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial, and business affairs of the University and Potomac State School of West Virginia University.

West Virginia University Bulletin
Series 52, No. 7-1, January, 1952

Entered as second-class matter July 15, 1929, at the post-office
in Morgantown, W. Va., under the Act of August 24, 1912.
Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

IRVIN STEWART, LL.B., A.B., A.M., Ph.D., LL.D., *President of the University*
CHARLES THOMPSON NEFF, JR., A.B., LL.D., *Vice-president of the University*
EDNA ARNOLD, M.A., *Dean of Women*
CHARLES EDWARD BUTLER, M.A. in L.S., *Librarian*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
J. EVERETT LONG, M.A., *Registrar of the University*
EDWARD JERALD VAN LIERE, B.A., M.S., M.D., Ph.D., Litt.D., F.A.C.P., *Dean and Professor of Physiology*

THE FACULTY

PROFESSORS

EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; Ph.D., University of Chicago, 1927; Litt.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; Ph.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1917; Ph.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy and Chairman of Committee on Admissions and Scholarship*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
DAVID FIELDING MARSH, *Professor of Pharmacology*
A.B., West Virginia University, 1939; M.S., Purdue University, 1940; Ph.D., University of California, 1942.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; Ph.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., Ph.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE, *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., Rochester, 1942; M.D., Vermont, 1951.

ASSOCIATE PROFESSORS

CECIL BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

*Part time. In private practice.

THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*

B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.

JOHN CLIFFORD STICKNEY, *Associate Professor of Physiology*

B.S., Wheaton College, 1933; M.S., University of Washington, 1936; Ph.D., University of Minnesota, 1940.

ASSISTANT PROFESSORS

GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*

B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.

FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*

A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.

ERNEST HARRY LUDWIG, *Assistant Professor of Bacteriology*

B.S., M.S., Ph.D., University of Pennsylvania, 1937, 1938, 1947.

MULLEN O. COOVER, *Assistant Professor of Biochemistry*

A.B., Shepherd State College, 1942; M.S., West Virginia University, 1947; Ph.D., George Washington University, 1950.

JAMES THOMAS HICKS, *Assistant Professor of Pathology*

A.B., B.S., M.S., University of Pittsburgh, 1945, 1946; Ph.D., George Washington University, 1950.

ARCHIE LEMUAL STARKEY, *Assistant Professor of Medicine (Physical Diagnosis) (Superintendent of Hopemont Sanitarium)*

B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.

INSTRUCTORS

CARL EDWARD JOHNSON,* *Instructor in Medicine (Physical Diagnosis)*

A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.

DONALD ATWOOD HERRING, *Instructor in Pharmacology*

B.S. in Pharmacy, Ohio State University, 1941.

MAYNARD PRIDE,* *Instructor in Surgery*

A.B., Marietta College, 1935; M.D., Western Reserve, 1939.

WILLIAM AUGUST EHRCOTT,* *Instructor in Pathology*

B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.

JOHN B. HYDE, *Instructor in Anatomy*

B.S., University of South Dakota, 1944.

CHARLES MARION CANBY, *Instructor in Bacteriology*

A.B., Shepherd College, 1947; M.S., West Virginia University, 1949.

CARROLL RAYBOURNE BALL, *Instructor in Histology*

B.A., M.S., University of Mississippi, 1947, 1948.

ASSISTANTS

LELA VIRGINIA BONNER, *Assistant in Pathology*

B.S., West Virginia University, 1947.

VERONICA ARMAGHAN, *Teaching Assistant in Pathology*

A.B., Yankton College, 1927; D.Sc., Johns Hopkins University, 1937.

JOSEPH A. BERARDINELLE, *Assistant in Bacteriology*

B.S., New Mexico Agricultural and Mechanical College, 1949; M.S., West Virginia University, 1951.

LEAR TWIGG POWELL, *Graduate Assistant in Biochemistry*

A.B., University of Denver, 1950.

DAVID SCOTT HUMPHRIES, *Graduate Assistant in Biochemistry*

B.S., Wake Forest, 1951.

JAMES EDWARD EDWARDS, *Graduate Assistant in Physiology*

A.B., Harvard College, 1949; M.S., West Virginia University, 1951.

*Part time. In private practice.

LECTURERS

- ELDEN BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.
ROGER A. KENNEDY, *Lecturer in Public Hygiene (Monongalia County Health Officer)*
B.A., M.A., Cambridge University, 1923, 1924; M.D., Saint Thomas Hospital
Medical School, London, 1928.

TECHNICIANS

- PATRICIA ANN DENNISON, *Technician in Pathology*
B.S., West Virginia University, 1949.
FABRY LIVINGSTONE HAWK, *Laboratory and X-Ray Technician in Pathology*
Registered Medical Technologist.
ALFRED HOWARD, *Animal Caretaker and Technician for the Departments of Physiology
and Pharmacology*
B.S., West Virginia University, 1949.
MARGARET FORD GRAY, *Technician in Anatomy and Histology*
B.S., West Virginia University, 1949.

CLERICAL PERSONNEL

- MILDRED F. FISHER, *Secretary to the Dean*
MARGARET L. LIBERATORE, *Secretary and Record Clerk*
ANNICE H. OGDEN, *Secretary in Bacteriology and Pharmacology*
MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946.

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

- JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor
of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical
College, 1939.
CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate
Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
SAMUEL JOHN MORRIS, *Physician and Medical Adviser to the Department of Athletics*
M.D., University of Maryland, 1912.
HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
EDGAR FRANK HEISKELL, JR.,* *Assistant Physician*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University
Medical School, 1943.
JOHN MORGAN FOLEY, *Assistant Physician*
B.S., West Virginia University, 1948; M.D., Medical College of Virginia, 1950.

NURSES

- ROSE MARIE GERARD, R.N., *Nurse in the University Health Service*
HELEN LOUISE KUDLA, R.N., *Nurse in the University Infirmary*
MARY ELLEN BROWN, R.N., *Nurse in the University Infirmary*
MARJORIE JANE WHITELEATHER, R.N., *Nurse in the University Infirmary*
VIRGINIA JUANITA TOLAND, R.N., *Nurse in the University Infirmary*
VIRGINIA C. PRIDE, R.N., *Nurse in the University Infirmary*
HELEN VEREB, *Nurses' Aide in the University Health Service*

TECHNICIANS

- FABRY LIVINGSTON HAWK, *Chief Technician in the University Health Service*
Registered Medical Technologist

*Part time. In private practice.

CLERICAL PERSONNEL

HELEN CLARISSA O'NEILL, *Secretary in the University Health Service*
A.A. Immaculata College, 1936
ETHEL FEATHER ELLIS, *Receptionist in the University Health Service*
MARGARET ANNE WALTER, *Clerk in the University Health Service*

THE STANDING COMMITTEES

Executive: E. J. VAN LIERE (*chairman*), F. R. WHITTLESEY, and C. B. PRIDE.
Admissions and Scholarship: S. B. CHANDLER (*chairman*), C. K. SLEETH, M. L. HOBBS, and R. F. KRAUSE.
Library: S. B. CHANDLER (*chairman*), J. C. STICKNEY, C. K. SLEETH, M. O. COOVER, and J. T. HICKS.
Research, Fellowships, and Grants: D. F. MARSH (*chairman*), D. W. NORTHUP, M. L. HOBBS, J. M. SLACK, and E. J. VAN LIERE.
Seminars: C. K. SLEETH (*chairman*), J. C. STICKNEY, E. J. VAN LIERE, and E. H. LUDWIG.
Clinical and Special Facilities: C. K. SLEETH (*chairman*), C. B. PRIDE, M. L. HOBBS, G. R. MAXWELL, F. R. WHITTLESEY, and J. J. LAWLESS.
Curriculum: C. K. SLEETH (*chairman*), E. H. LUDWIG, E. J. VAN LIERE, and D. F. MARSH.
Student Loans and Scholarships: J. C. STICKNEY (*chairman*), E. J. VAN LIERE, T. W. WILLIAMS, J. B. HYDE, and J. T. HICKS.
Medical Technology: M. L. HOBBS (*chairman*), E. H. LUDWIG, R. F. KRAUSE, and E. J. VAN LIERE.
Policy: Heads of departments and the director of the University Health Service.
Graduate Study: J. M. SLACK (*chairman*), D. F. MARSH, J. C. STICKNEY, and R. F. KRAUSE.
Social: J. C. STICKNEY (*chairman*), J. B. HYDE, E. H. LUDWIG, C. R. BALL, and M. O. COOVER.

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The School of Medicine as now organized had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. Degree. There are two possibilities as noted on page 9.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

PROPOSED EXPANSION OF MEDICAL SCHOOL

The West Virginia Legislature in 1951 made provision for the expansion of the Medical School to include the four years required for the M.D. Degree. Training in dentistry and nursing also is to be included. It is too early to announce dates for the beginning of this program, inasmuch as the necessary planning and construction work will require many months. Until further announcement, the two-year curriculum will be continued as in recent years.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination, including blood tests, urinalysis, and chest X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes five physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped and operated as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, located at Hopemont, Preston County, 40 miles from Morgantown, is approved by the American Medical Association for residency. It has 450 beds and is a hospital primarily for pulmonary diseases. A substantial number of beds, however, are set aside for purely medical and surgical cases. By a special arrangement between the superintendent and staff of the hospital and West Virginia University, the School of Medicine has access to the hospital for teaching purposes and the superintendent and members of the staff become University officials. This arrangement provides an excellent affiliation for instruction in examination of the sick, with particular reference to pulmonary diseases.

By special arrangements, students of the School of Medicine also have access to clinical facilities of the following institutions for instruction in physical diagnosis, medicine, and surgery: Monongalia General Hospital, with a bed capacity of 100; and Vincent Pallotti Hospital, a private general hospital with a bed capacity of 90.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from Vincent Pallotti Hospital, Monongalia General Hospital, and Hopemont Sanitarium. This arrangement materially augments the pathological museum, which already numbers about 1,400 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence, besides assuring authoritative records for medico-legal purposes.

BUILDINGS AND EQUIPMENT

The three-story Medical Building furnishes room for most of the School of Medicine. On the first floor are the offices of the Dean, a general lecture room, a reading and study room, and the pharmacological laboratory. On the second floor are laboratories for bacteriology and physiology. On the third floor are laboratories for gross and microscopic anatomy, a large lecture room, and the X-ray room. All departments have appropriate offices, technical rooms, and storage space. Embalming and cadaver storage rooms are in the basement. Quarters for experimental animals are provided in separate buildings.

The biochemical laboratory occupies rooms in the Chemistry Building. The department office is Room 430; communicating with it are three rooms used as stock and preparation rooms and for research.

The Department of Pathology occupies rooms on the second floor of the University Health Center; a good-sized laboratory-lecture room and the necessary rooms for a museum, preparations, storage, offices, and private laboratories.

LIBRARY

The Medical Library is not organized as a separate unit but is housed in the University Library, where publications of prime importance to the students and faculty of the School of Medicine are to be found in close proximity to related biological and chemical publications. Purely chemical works, many of which are of interest in medicine, are housed in the Chemistry Building which is adjacent to the Library. Additional current issues of essential medical journals and periodicals of general scientific interest are conveniently available in the students' lounge in the School of Medicine.

There are about 18,000 catalogued volumes in the Library which constitute the medical collection. Roughly half of these are bound volumes of periodicals; the remainder are textbooks and monographs concerned with pre-clinical fields for the most part but comprising also better representative works in internal medicine, surgery, gynecology, obstetrics, public health, hygiene, and history of medicine. Certain other publications are available on bibliofilm, for which reading facilities are offered in the Library and in the Department of Bacteriology. The Library has a subscription list of over 140 leading medical journals. Various departments of the School of Medicine receive a number of special journals, and the Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

The Library maintains an inter-library loan system whereby materials not contained in the Library may be borrowed from the Surgeon General's Library, Library of Congress, or other libraries. Complete sets of various abstracting journals, including the Quarterly Cumulative Index Medicus, may be found in the general reading room of the Library. Library service is available to physicians of the state through loans of publications or through the furnishing of photostatic copies of articles.

A committee from the faculty of the School of Medicine is active in the interests of the Medical Library.

LIVING ACCOMMODATIONS

The University maintains three large dormitories, one for men and two for women. Cost of room and board in all dormitories ranges from \$459 to \$549 per academic year of 9 months. The University reserves the right to change these rates as necessity demands. For information as to accommodations and rates, address the office of the Business Director of Residences, West Virginia University, Morgantown.

Medical students, in the main must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the dormitories. For further information concerning houses on the approved list, men should address the Office of Off-Campus Housing, Room 207, Administration Building, West Virginia University, Morgantown. Women should communicate with the office of the Dean of Women, West Virginia University, Morgantown.

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. Registration fees for residents are \$258; for nonresidents, \$408 per academic year. There is an annual breakage deposit of \$10, part of which is usually returned at the end of the year. The total legitimate cost of a nine-month session for medical students in residence will range from \$1,000 to \$1,500 exclusive of traveling expenses. The School of Medicine furnishes microscopes for students without charge.

LOANS

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, others available to students of all colleges in the University. For information about loans, inquiries should be made to Director Joseph C. Gluck, Committee on Prizes, Scholarships, and Loan Funds, West Virginia University, Morgantown.

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 P.M. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring Dr. John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association; however, they exceed the minimum standards of those associations.

All applications for admission are passed upon by the Committee on Admissions of the School of Medicine, composed of four members of the medical faculty. Admission is by recommendation of this committee and with the approval of the Dean of the School.

The number of students that can be accommodated is strictly limited. In recent years the number of applicants has been so great that only residents of West Virginia can be considered, and of these only a small percentage can be admitted. Those admitted are the applicants who, in the judgment of the Committee on Admissions, are best qualified for the study of medicine, and who give highest promise of full service in the practice of medicine. Recently the number of applicants has been so great that the School could not accommodate all who were reasonably well qualified.

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must have credit for at least 15 units of high-school work. This must include four units of English,¹ two of mathematics (algebra, one, and plane geometry, one), and other subjects as specified in the general admission requirements of the University. The School of Medicine strongly urges two units of Latin.

COLLEGE CREDITS REQUIRED

The applicant must have credit for at least three years in a college of recognized standing. This credit must total at least 90 semester hours exclusive of military and physical education.

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which it approves for premedical education. Medical schools must give preference to applicants from institutions on this list. Schools may accept students from other institutions only when they show evidence of superior ability, as indicated by adequate credits and superior grades. Students planning premedical work should consult the School of Medicine or other authentic source for information about approved colleges.

Credits submitted by applicants for work done elsewhere than in West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

- A. REQUIRED SUBJECTS: The following subjects and hours are *minimum* requirements:
- | | |
|---|--------|
| <i>English Composition and Rhetoric</i> | 6 hr. |
| <i>Biological Sciences</i> | 15 hr. |
- Must include General Zoology (preferable)—8 hours or General Biology—8 hours. Comparative Vertebrate Anatomy and, if possible,

¹Students who present only 3 units of English may satisfy this requirement by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition.

Vertebrate Embryology. Parasitology and Genetics are suggested electives. Human Anatomy, Physiology, Histology, or Bacteriology are not accepted as part of required hours and are not useful electives.

Chemistry 20 hr.
Must include inorganic chemistry—8 hours; quantitative analysis—3 hours, three hours of either physical chemistry or qualitative analysis, and organic chemistry (aliphatic and aromatic—6 hours). Physiological Chemistry is not acceptable.

Psychology 3 hr.

A Modern Foreign Language 12 hr.

German or French preferred. Must be in one language. Two units in high school are accepted as 6 hours of the requirement.

B. ELECTIVES: Other subjects to make the required 90 hours. In choosing electives, the premedical student should plan to secure a broad education, including adequate work outside the required sciences. Students should avoid courses which are in any sense a duplication or preview of courses given in Medical School. The following are suggested:

Mathematics—College algebra and trigonometry, while not absolute requirements, are looked upon with high favor by the Committee on Admissions. These subjects should be taken in the freshman premedical year because of their great usefulness in the study of physics and chemistry. Analytical geometry and calculus are of advantage to those students who can include them in their program.

Latin: Either high school or college Latin is strongly urged. It will be of great value.

Other Desirable Subjects: Art (drawing), botany, economics, geology, Greek, history, speech, political science, and sociology.

OTHER ITEMS CONCERNING ELIGIBILITY FOR ADMISSION

Excellence of Premedical Scholarship

The quality of premedical scholarship is the best single criterion of probable success in the study of medicine. For this reason applicants with higher grades are given preference. Students with "average" premedical grades have only a small chance of doing satisfactory work in the School of Medicine even if admitted. An excess of credit hours or higher degrees do little to offset the disadvantage of low grades in securing admission to medical schools.

Medical College Admission Test

The score on this test is used as one criterion of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service of Princeton, New Jersey. Tests are announced for May 10 and November 3, 1952. Students should take it in May. Places may be filled before the November scores are available. Students should consult premedical advisers about making application more than a month before the date of this test.

Residence

Preference is given to residents of West Virginia. For several years resident applicants have been so numerous that there have been no places available for nonresidents.

Personal Attributes

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Persons who have been out of college for some years, or who are several years older than the average applicant, are admitted only when they show unmistakable evidence of superior ability and training. Good health is a necessary qualification.

Previous Failures

Applicants who have been subject to suspension from this or other medical schools can be admitted only in exceptional cases, when the Committee on Admissions considers such readmission justified.

When to Apply for Admission

Application for admission in September 1953 should be made promptly upon completion of the school year 1951-52 (June 1952). Applications will be considered until the class is filled, but early application is very advantageous.

How to Apply for Admission

Application for admission must be made upon blanks which may be obtained from the Dean's office upon request. A small unmounted photograph must accompany the application. The completed applications should be returned promptly to the School of Medicine.

Credentials

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the School of Medicine, an official transcript of his work. (The University cannot accept transcripts sent by the applicant himself.) Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the School of Medicine.

Recommendations

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, two instructors in different science departments to send letters of recommendation to the School of Medicine.

Notification of Applicants

All applicants will be informed of the action of the Committee on Admissions as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

PREMEDICAL CURRICULUM AT WEST VIRGINIA UNIVERSITY

In keeping with the need for good premedical training, West Virginia University, through its premedical adviser, maintains careful supervision over those students who have declared their intention of preparing for the study of medicine. It is not the policy of West Virginia University to give special premedical courses but rather to maintain a well-balanced curriculum composed of courses regularly scheduled in various departmental offerings.

This curriculum does not involve extensive specialization in any subject. There are no majors and minors. High specialization in one subject probably is not the best preparation for the average student. The curriculum includes as requirements those subjects which are needed for entrance to medical schools, but it also allows wide latitude in choice of electives in other departments so that the student may gain some insight into the various fields of knowledge in which all educated persons should be versed.

REGISTRATION

All medical students are expected to register at the Medical Building on the days set apart for registration at the beginning of each semester as announced in the calendar on page 3.

No student will be permitted to register in the School of Medicine after the first week of classes.

Persons who are not registered as students in the University and who are not members of the administrative or teaching staffs shall not be admitted to regular attendance in School of Medicine classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Scholarship Committee and the professor in charge of the course.

DEPARTURE FROM SCHEDULED WORK

Students must register for all prescribed courses for each semester except by special permission from the Scholarship Committee of the School of Medicine. This permission is not valid until it has been reported to the Registrar for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw during the semester should do so in regular manner. Consult the Dean's office for steps which must be taken.

FEES

All fees are due and payable at the office of the Comptroller on the day of registration.² Students registering in the School of Medicine pay the following:

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of registration in the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant. The deposit paid by students under the G.I. Bill of Rights will be refunded after the full tuition for the semester has been paid.

TUITION AND OTHER FEES

	Residents ⁴	Non-Residents ⁴
Full-time students ³ (per semester) Tuition	\$ 87.00	\$162.00
University Fees	42.00	42.00
Total	\$129.00	\$204.00
Part-time students (per semester hour) ³	8.00	12.50
Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4 per credit hour in addition to the fee charged in the college or school in which they are registered.		
Breakage deposit (for year)		\$10.00
Breakage deposit for University students not regularly enrolled in medical school, for one laboratory course, \$5, and for more than one course, \$10.		

SPECIAL FEES

Late registration ⁵	\$ 2.00
Graduation fee ⁶	10.00
Student's record fee ⁷	1.00

REFUNDING OF FEES

Fees will be refunded according to the following schedule to students who withdraw regularly from the University.

²Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

	Amount of Refund
During the first and second weeks	All fees less \$2.50
During the third and fourth weeks	80% of fees
During the fifth and sixth weeks	60% of fees
During the seventh and eighth weeks	40% of fees
Beginning with ninth week	No refunds allowed

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

- A—excellent given only to students of superior ability and attainment
- B—good—given to those students who are well above average but who are not in the highest group
- C—fair—average students
- D—poor but passing
- I—incomplete
- F—failure
- W—all withdrawals prior to end of second week following date for mid-semester reports
- WP—withdrew passing
- WF—withdrew failing
- FIW—failure because of irregular withdrawal

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF," "FIW"—0. When the grade of "I" becomes converted into a grade carrying credit, the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Scholarship. (University Rule.)

³A full-time student is one who is registered for 10 or more semester hours during a semester. A part-time student is one who is registered for fewer than 10 semester hours per semester.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding his registration. No nonresident student may establish domicile in this State, entitling him to reductions or exemptions of tuition, merely by his attendance at the University. A minor student whose parents have become domiciled in West Virginia after the student's original registration in the University will be deemed to have the domicile of his parents and be entitled to pay resident fees thereafter. Moreover, any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State, at least twelve months prior to his reregistration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

⁵Charged to students who do not procure class cards during the regular registration days set forth in the calendar on page 3.

⁶The graduation fee is payable by all students at the beginning of the semester or term in which they expect to receive their degrees or diplomas.

⁷One transcript of a student's record is furnished by the Registrar without charge. This fee is charged for furnishing an additional transcript.

For Medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Scholarship Committee.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

PROMOTIONS AND SUSPENSIONS

The Committee on Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Scholarship Committee.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia, as noted on page 9.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

Proficiency in English. The University Senate has recommended that each school and college of the University offering the baccalaureate degree adopt the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

The School of Medicine has adopted this requirement. This applies to those students in Medicine and Medical Technology who have not previously satisfied this requirement. These students must take this examination during their first semester of registration in the Medical School.

This examination will be given by an English Proficiency Board named by the President of the University.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. Medical students may work toward this degree by study during four summer terms (two full summers.) For fuller information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements of the Graduate School*.

Only a small number of graduate students can be accommodated in departments of the School of Medicine. Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

SCHEDULE OF COURSES FOR 1952-53

COURSE	HR. PER WEEK			HR. PER SEMESTER			SEMESTER CREDIT HOURS*
	Lect	Lab.	Total	Lect	Lab.	Total	

FIRST YEAR — FIRST SEMESTER

Gross Anatomy 201	2	8	10	32	128	160	6
Histology 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	9	13	64	144	208	7

FIRST YEAR — SECOND SEMESTER

Gross Anatomy 202	2	6	8	32	96	128	4
Neuroanatomy 203	2	6	8	32	96	128	4
Embryology 206	2	0	2	32	0	32	2
Medical Bacteriology 221	3	9	12	48	144	192	6
Physiology 242	2	3	5	32	48	80	3

SECOND YEAR — FIRST SEMESTER

Hygiene 222	2	0	2	32	0	32	2
Physiology 243	5	6	11	80	96	176	7
Gen. and Tumor Pathology 251	5	9	14	80	144	224	7
Pharmacodynamics 262	3	0	3	48	0	48	3
Physical Diagnosis 271	1	0	1	16	0	16	*
Introductory Medicine 272	0	2	2	0	32	32	*
Psychobiology 273	1	0	1	16	0	16	1
Biostatistics 274	1	0	1	16	0	16	1

SECOND YEAR — SECOND SEMESTER, FIRST HALF

Applied Anatomy 204	2	4	6	16	32	48	2†
Special Pathology 252	1	2	3	8	16	24	§
Clinical Pathology 254	2	4	6	16	32	48	§
Medical Pharmacology 263	4	6	10	32	48	80	§
Physical Diagnosis 271	1	2	3	8	16	24	§
Introductory Medicine 272	2	0	2	16	0	16	§
History of Medicine 275	1	0	1	8	0	8	0
Surgery, Principles of 281	2	0	2	16	0	16	§
Obstetrics 291	2	0	2	16	0	16	§

SECOND YEAR — SECOND SEMESTER, SECOND HALF

Special Pathology 252	2	2	4	16	16	32	2
Clinical Pathology 254	3	7	10	24	56	80	3
Medical Pharmacology 263	3	5	6	24	24	48	4
Clinical Anesthesiology 264	1	0	1	8	0	8	0
Physical Diagnosis 271	2	2	4	16	16	32	3
Introductory Medicine 272	2	2	4	16	16	32	3
History of Medicine 275	1	0	1	4	0	4	0
Surgery, Principles of 281	2	2	4	16	16	32	2
Obstetrics 291	2	0	2	16	0	16	2

*Course continues throughout the year.

†Course completed at mid-semester.

§Course continues throughout the semester.

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

8	9	10	11	12	1	2	3	4	5
Biochemistry						Histology			
Gross Anatomy						Histology			
Biochemistry						Gross Anatomy			
Gross Anatomy			Biochem.			Histology			
Biochemistry						Histology			

FIRST YEAR—SECOND SEMESTER

8	9	10	11	12	1	2	3	4	5
Neuroanatomy						Bacteriology			
Emby. G. Anatomy		Neuro.				Physiology			
Neuroanatomy		Physiol.				Bacteriology			
Emby. G. Anatomy						Bacteriology			
Gross Anatomy		Physiol.				Bacteriology			

SECOND YEAR—FIRST SEMESTER

8	9	10	11	12	1	2	3	4	5
Pharm. Physiol. Medicine						Pathology			
Pathology		Physiol.				Physiology			
Pathology		Hygiene Physiol.				Pathology			
Pharm. Physiol. Biostat.		Psychobiol.				Physiology			
Pharm. Phys. Diag Hygiene Physiol.						Pathology			

SECOND YEAR—SECOND SEMESTER, FIRST HALF

8	9	10	11	12	1	2	3	4	5
Pharm. Obstetrics	Cl. Path.	Phys. Diag.				Pharmacology			
Pharm. Medicine	Hist. Med.	Surgery				Applied Anatomy			
Medicine Pharm.	Clinical Pathology					Pharmacology			
Pharm. Cl. Path.	Obstet. Surgery					Applied Anatomy			
Physical Diagnosis	Clinical Pathology					Pathology			

SECOND YEAR—SECOND SEMESTER, SECOND HALF

8	9	10	11	12	1	2	3	4	5
Medicine or Surgery	Cl. Path.	Obstet.				Pathology	Hist. Med.	Anesth.	
Medicine or Surgery	Pharm.	Surgery				Clinical Pathology			
Medicine Phys. Diag.	Pathology					Pharmacology			
Medicine Phys. Diag	Pharm.	Surgery				Clinical Pathology			
Physical Diagnosis	Pharm.	Obstet.				Clinical Pathology			

COURSES OF INSTRUCTION

For convenience each course is designated by the name of the department and the number of the course. The plan for numbering courses in West Virginia University is as follows:

Courses 1 to 99—courses primarily for freshmen and sophomores.

Courses 100 to 199—courses open to juniors and seniors.

Courses 200 to 299—advanced courses for juniors, seniors, and graduates.

Courses 300 to 399—courses open to graduates only.

The following abbreviations are used in the announcements of courses:

I—a course offered during the first semester.

II—a course offered during the second semester.

I, II—a semester course offered each semester.

Yr.—a continuous course extending through two semesters.

S—a course offered during the summer terms.

hr.—number of semester hours credit per course.

Conc.—concurrent.

NOTE—Courses marked “*” are required of first-year students; those marked “†” are required of second-year students.

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information see *Announcements of the Graduate School*.

ANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructors HYDE and BALL.

- 201.* GROSS ANATOMY. I. 6 hr. PR: Zoology 2, Zoology 231 (Comp. Anatomy) desirable. Lecture, 2 hr. per week; lab., 8 hr.
- 202.* GROSS ANATOMY. II. 4 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 2 hr. per week; lab., 6 hr.
- 203.* NEUROANATOMY. II. 4 hr. PR: Histology 205; Anatomy 201. Lecture, 2 hr. per week; lab., 6 hr.
- 204.† APPLIED ANATOMY. II. 2 hr. PR: Anatomy 201, 202, 203, and Embryology 206. Lecture, 2 hr. per week; lab., 4 hr. during first half of semester.
- 205.* HISTOLOGY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. Histological structure and elementary embryology of tissues and organs. Lecture, 3 hr. per week; lab., 9 hr.
- 206*. HUMAN EMBRYOLOGY. II. 2 hr. PR: Histology 205 and Anatomy 201 (Human Anatomy). Comprehensive survey of human development in relation to gross and microscopic structure. Lecture, 2 hr. per week.
- 211. ANATOMY OF THE SYMPATHETIC NERVOUS SYSTEM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
- 212. APPLIED ANATOMY OF THE PELVIS AND PERINEUM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
- 213. SPECIAL PROBLEMS IN VASCULARIZATION. I or II. 2-5 hr. PR: Histology 205 or its equivalent. The analysis of vascular beds and their relation to tissues and organs. Laboratory. Hours to be arranged.
- 214. ADVANCED HISTOLOGY. I or II. 2-5 hr. PR: Histology 205 or equivalent. Special problems in microscopic anatomy. Hours to be arranged.

215. ADVANCED EMBRYOLOGY. I or II. 2-5 hr. Topics to be chosen to meet special needs of students. Hours to be arranged. Open to properly qualified students.
301. ADVANCED ANATOMY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
311. RESEARCH IN MICROSCOPIC OR DEVELOPMENTAL ANATOMY. I or II or Yr. 2-5 hr. Hours to be arranged. Open to properly qualified students.

BACTERIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professor LUDWIG; Instructor CANBY; Lecturer KENNEDY; Assistant BERARDINELLE

220. PATHOGENIC BACTERIOLOGY. I, S. 5 hr. PR or Conc.: Chemistry 131 (Organic Chemistry). For students in Medical Technology and Pharmacy. Detailed study of microorganisms with emphasis on those causing human diseases. Lecture, 2 hr. per week; lab., 8 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.* MEDICAL BACTERIOLOGY. II. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry), Biochemistry 231 desirable. Detailed study of pathogenic microorganisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr.
- 222.* PUBLIC HYGIENE. I. 2 hr. PR: Consent of instructor. Introduction into the principles of public health. Lecture 2 hr. per week.
224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.
- 320, 321. ADVANCED BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsia, and viruses. Graduate students only.
- 323, 324, 325, 326. RESEARCH IN BACTERIOLOGY. I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professor COOVER; Assistants POWELL and HUMPHRIES

139. GENERAL BIOCHEMISTRY. II. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics and Medical Technology. Open to other qualified students.
230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.
- 231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab., 9 hr.
237. SEMINAR IN BIOCHEMISTRY. Yr. 2 hr. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.
- 330, 331. BIOCHEMICAL PREPARATIONS. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.

- 333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

- 275.† HISTORY OF MEDICINE. II. No Credit. A brief history of the development of the science and art of medicine. Lecture, 2 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, and STARKEY; Instructor JOHNSON.

- 271.† PHYSICAL DIAGNOSIS. Yr. 3 hr. Lecture, 1 hr. per week during first semester; lecture, 1 hr. per week, lab., 2 hr. during first half of second semester; lecture, 2 hr. per week, practical work with patients, 2 hr. during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 272.† INTRODUCTORY MEDICINE. Yr. 3 hr. Medical clinic—demonstration of clinical cases, 2 hr. per week during first semester; lecture, 2 hr. per week during first half of second semester; lecture, 2 hr. demonstration of clinical cases, 2 hr. per week during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 273.† PSYCHOBIOLOGY. I. 1 hr. Introduction to the study of human personality, normal and abnormal. Lecture, 1 hr. per week.
- 274.† BIostatISTICS. I. 1 hr. Planned to aid in the understanding of the statistical methods commonly used in medical and biological work, and in the evaluation of experimental data in these fields. Lecture, 1 hr. per week.

OBSTETRICS

Professor VAN LIERE

- 291.† OBSTETRICS. I. 2 hr. PR: Anatomy 201, 202 (Human anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor HICKS; Instructor EHRGOTT; Assistant BONNER; Teaching Assistant ARMAGIAN

151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab., 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† GENERAL AND TUMOR PATHOLOGY. I. 7 hr. PR. approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† SPECIAL PATHOLOGY. II. 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture, 2 hr. per week, lab., 2 hr. during second half of semester.
- 254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.

256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor MARSH; Instructor HERRING; Lecturer TUCKER

160. FUNDAMENTALS OF PHARMACOLOGY. II. 1 hr. PR or conc.: Physiology 141. For students in the College of Pharmacy. Lecture 1 hour per week.
161. PRACTICAL PHARMACOLOGY. I. 4 hr. PR: Pharmacology 160. For students in the College of Pharmacy. Lecture 3 hours per week; lab., 3 hours.
- 262.† PHARMACODYNAMICS. I. 3 hr. PR: Physiology 141 or 242. Lecture, 3 hr. per week. The mechanism of action of drugs on living things. The fundamental relationships between drugs and drug action.
- 263.† MEDICAL PHARMACOLOGY. II. 4 hr. PR: Pharmacology 262. Lecture, 4 hr. per week, lab., 6 hr. first half of semester; lecture, 3 hr. per week, lab., 3 hr. second half of semester. The action of drugs commonly used clinically for man and animals.
- 264.† CLINICAL ANESTHESIOLOGY. II. No credit. PR: registration in Pharmacology 263. 1 hr. per week second half of semester. Practical demonstrations of anesthesia.
266. BIOCHEMORPHOLOGY. II. 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. ANESTHESIOLOGY. I, II, S. 3 hr. PR: Physiology 243. Production of surgical anesthesia in man. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP and VAN LIERE; Associate Professor STICKNEY; Assistant EDWARDS

141. ELEMENTARY PHYSIOLOGY. II. 4 hr. PR: Biology 1, 2 or Zoology 1, 2, Chemistry 131 (Organic Chemistry) (or Conc.) For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr.

- 242.* PHYSIOLOGY. II. 3 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology of muscle and nervous system. Lecture, 2 hr. per week; lab., 3 hr.
- 243.† PHYSIOLOGY. I. 7 hr. PR: same as for Physiology 242. Physiology of circulation, respiration, digestion, metabolism, secretion, endocrines, special senses. Lecture, 5 hr. per week; lab., 6 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE

- 281.† PRINCIPLES OF SURGERY. II. 2 hr. Lecture, 2 hr. per week during the first half of semester; lecture, 2 hr. per week during second half of semester, demonstrations of clinical cases and operative technique, 2 hr.

MEDICAL STUDENTS 1951-1952

FIRST-YEAR STUDENTS (ENTERED SEPTEMBER, 1951)

Battaglino, John Joseph, Jr. (B.S., Concord College, 1951)	Bluefield
Bell, William Edward (A.B., West Virginia U., 1951)	Morgantown
Blethen, Harry Samson, Jr. (A.B., West Virginia U., 1951)	Huntington
Bobbitt, James McCue (B.S., West Virginia U., 1951)	Bluefield
Bradford, John David (A.B., West Virginia U., 1951)	Grafton
Bryan, William Harvey (B.S., Marshall College, 1951)	Huntington
Cokeley, John McMillen	Morgantown
Cooper, Reginald Rudyard	Dry Fork
*Edwards, James Edward (A.B., Harvard College, 1949, M.S., W.V.U., 1951)	Montgomery
Goodno, John Alden, Jr. (A.B., Marietta College, 1951)	Huntington
Jackson, Harry Arden	Gassaway
LaNeve, Ralph James	Newell
Lantz, Donald Ross (B.S., Marietta College, 1951)	Parkersburg
Meckley, Arnold Hugh (A.B., West Virginia U., 1951)	Elkview
Myles, John Turpin	Fayetteville
Pickett, David Lee (B.S., Denison University, 1951)	Moundsville
Powell, Douglas Oxley	Huntington
Provins, Austin Andrew (A.B., West Virginia U., 1951)	Morgantown
Riley, William Joseph	Spencer
Sadler, William Samuel (B.S., Marshall College, 1951)	Barboursville

Sheppard, Mark, Jr.	Barrackville
Silverman, Howard Ayres.....	Beckley
Sinclair, William Paige	Wheeling
Snouse, William Reed (A.B., West Virginia U., 1951).....	Fairmont
Solan, George Miley (B.S., The American University, 1950)	Moorefield
Stone, Robert Earl (B.S., Marshall College, 1951).....	Logan
Stubbs, Bernard Francis.....	Wheeling
West, Wilk Otis	Princeton
Westfall, Arlie Harold (B.S., Fairmont State College, 1950)	Enterprise
Winkler, Charles Pinckney.....	Ronceverte
Winkler, Moseley Hubbard	Ronceverte
Wotring, Robert William, Jr. (A.B., West Virginia U., 1951).....	Coalwood

*Special student.

SECOND-YEAR STUDENTS (ENTERED SEPTEMBER, 1950)

Argiro, Thomas Robert (A.B., West Virginia U., 1948).....	Fairmont
Beale, Kenneth Neil (B.S., Fairmont State College, 1949)	Fairmont
Bogarat, Irwin Mendel (A.B., West Virginia U., 1950).....	Weirton
Busch, Gail William (B.S., Davis and Elkins College, 1950)	Elkins
Ciccarelli, Harold Edward (A.B., M.S., West Virginia U., 1949, 1950)	Chester
Cooke, Charles Robert (A.B., West Virginia U., 1950)	Oak Hill
Dewhurst, William Harvey (B.S., Marshall College, 1950).....	Huntington
Douthat, Rudenz Thomas (A.B., University of Michigan, 1950)	Huntington
Felton, Harold William (A.B., West Virginia U., 1950).....	Rowlesburg
Fox, Lewis Nevin (B.S., Marshall College, 1951).....	Prenter
Gialamas, Antonio (A.B., West Virginia U., 1951).....	Weirton
Harriman, William Henry, Jr. (A.B., West Virginia U., 1949)	Terra Alta
Harris, Jimmie Lee (A.B., West Virginia U., 1950).....	Alderson
Hatten, Don Franklin (A.B., West Virginia U., 1951)	Kenova
Hoffman, Charles Anthony (B.S., Hampden-Sydney College, 1950).....	Huntington
Lively, Charles Thomas (A.B., West Virginia U., 1950)	Charleston
Long, Thomas Porter (B.S., West Virginia Wesleyan College, 1949).....	Lindside
McCreary, Patricia Ann (A.B., West Virginia U., 1950)	Wellsburg
McKenzie, James Vincent (B.S., Marshall College, 1949).....	Quinwood
McLean, William David (B.S., Hampden-Sydney College, 1950)	Beckley
Markey, John B. (A.B., West Virginia U., 1950).....	Sharples
Martin, Gilbert Adrian, Jr. (A.B., West Virginia U., 1951)	Fairmont
Pelzel, Robert Burry (A.B., West Virginia U., 1947).....	Charleston
Richter, Betty Jane (A.B., West Virginia U., 1950)	Morgantown
Rickard, William Garrett (A.B., Berea College, 1949).....	Oak Hill
Ryburn, Samuel Benjamin (B.S., Hampden-Sydney College, 1950)....	South Charleston
Smith, David Dawson (B.S., West Virginia Wesleyan College, 1949).....	Logan
Smith, Emma Jane (A.B., West Virginia U., 1950)	Lost Creek
Van Winkle, Glenn Frederick (B.S., Marshall College, 1949).....	Charleston
Yoho, Alan Verl (A.B., West Virginia U., 1951)	Grafton

II. Curriculum in Medical Technology

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, etc., and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association, which inspects, evaluates, and approves schools. This School is included in the list of those approved by the American Medical Association. In this field, properly qualified persons, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

During the first two years the student is registered in the College of Arts and Sciences and is under supervision of the premedical adviser. These two years are considered as preliminary training.

The third and fourth years include specialized and technical training of the curriculum. During these years the student is under jurisdiction of the School of Medicine. These students are not to be regarded, however, as medical students, nor can any course taken during these years be counted toward the M.D. Degree.

Work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*.

R. F. KRAUSE (Professor of Biochemistry).

E. H. LUDWIG (Assistant Professor of Bacteriology).

E. J. VAN LIERE (Dean of Medical School).

ADMISSION REQUIREMENTS

- (a) Admission requirements for the first year (pretechnology) are the same as for the College of Arts and Sciences, namely, 15 units of high-school work, including subjects specified in the University *Catalog*. One unit of elementary algebra and one unit of plane geometry are very desirable.
- (b) For admission to the third year, students must complete the first two years of the curriculum outlined below in West Virginia University, or an equivalent program in other institutions of recognized standing.
- (c) Only a limited number of students can be accommodated in the third and fourth years. Preference is given to residents of West Virginia. Application should be made on forms obtainable from the School of Medicine and must be presented at the office of the Dean of the School. Applications should be made in February and will be considered after April 1. Admission is on recommendation of the Committee on Medical Technology and with approval of the Dean of the School of Medicine.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

FEES

For the first two years students pay the regular fees for students in the College of Arts and Sciences. In the last two years, while students are under the jurisdiction of the School of Medicine, there is an additional tuition fee of \$25 per semester. For the summer term of the fourth year the fee is \$5 for residents and \$7 for nonresidents. There is a breakage deposit of \$10 per year. The Graduation Fee of \$10 is due at the beginning of the last semester. Students not registered in the School of Medicine or the College of Pharmacy pay \$4 per semester hour for courses given by the medical school faculty, in addition to the regular fee for the college in which they are registered.

STANDARDS OF SCHOLARSHIP

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year with a grade-point average of 1.5 per registration hour.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

THE CURRICULUM

During the first two years the student is registered in the College of Arts and Sciences.

FIRST YEAR (PRETECHNOLOGY)

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Inorganic chemistry 1	4	Inorganic chemistry 2	4
General zoology 1	4	General zoology 2	4
English composition 1	3	English composition 2	3
Modern foreign language	3	Modern foreign language	3
Electives	2	Electives	2
Physical education	1	Physical Education	1

SECOND YEAR (PRETECHNOLOGY)

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Qualitative analysis 5	4	Quantitative analysis 15	3
English literature	3	English literature	3
Modern foreign language	3	Modern foreign language	3
General physics 1, 3	4	General physics 2, 4	4
Electives	2	Electives	2
Physical education	1	Physical education	1

NOTE: In addition to the courses listed above, male students must take military or air science to meet University requirements.

THIRD YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During this year, students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Pathogenic bacteriology 220	5	Elementary physiology 141	4
Organic chemistry 131	4	General biochemistry 139	4
Comparative anatomy 231	5	Parasitology 255	4
Electives	3	Clinical laboratory diagnostic methods 151	4

FOURTH YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygiene Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special straining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.,
110. RECORD KEEPING. Yr. 2 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

STUDENTS IN MEDICAL TECHNOLOGY

THIRD YEAR

Bowers, Lois Jean.....	Brushy Run
Farmans, Rosaline.....	Weirton
Grose, Glenna Mae.....	Alderson
Hill, Ruth Ann.....	Fairmont
Lane, Marilyn Jolly.....	Elm Grove
Lantz, James Jacob.....	Pine Grove
Minster, Nancy Jo.....	Beckley
Oliver, Erma Lee.....	Shinnston
Pallotta, Mary Agnes.....	Richwood
Samuel, Greta Ann.....	Clarksburg
Sikora, Dolores Theresa.....	Weirton
Stevens, Dorothea Anne	Dunbar

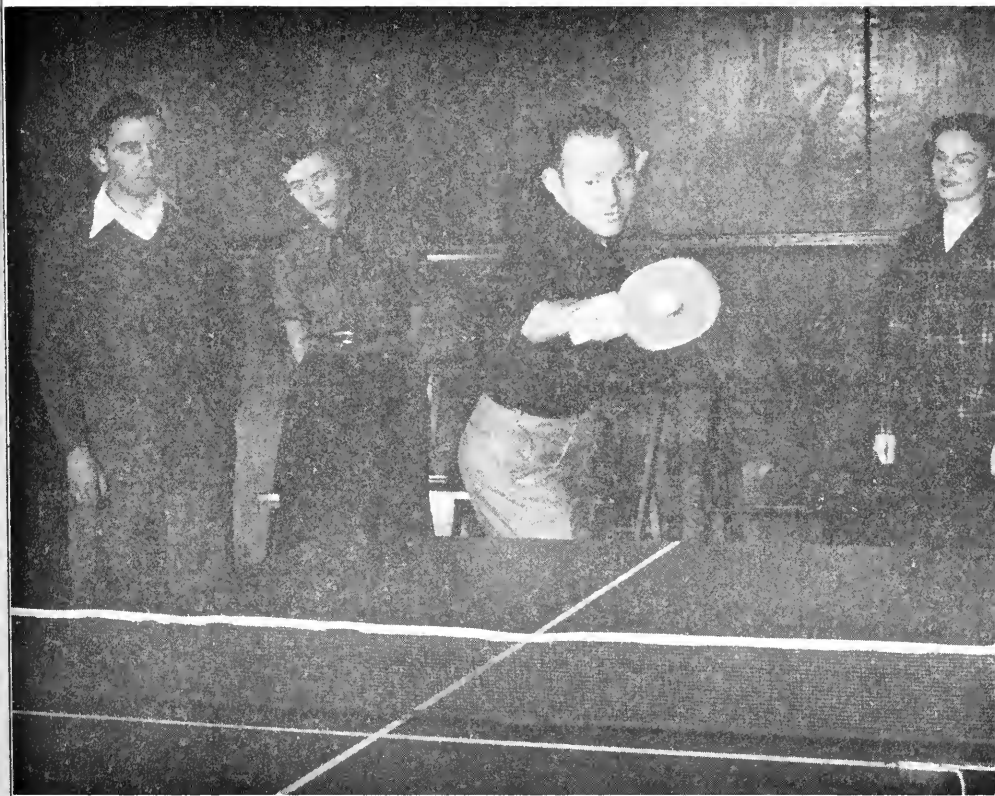
FOURTH YEAR

Bays, Robert Clowney.....	Russellville
Bishop, Georgia Jean.....	Oak Hill
Edwards, Jean Wood.....	Jaeger
Harman, Janet Rosalce.....	Harman
Hill, Ann Wagner.....	Romney
Huey, Peggy Louise.....	Mannington
Marra, Theresa Ann.....	Morgantown
O'Connor, Patricia Louise.....	Keyser
Orr, Helen Patricia.....	Grafton
Runco, Carmen Elizabeth.....	Wheeling









VU STUDENTS take time out to relax from studies



WVU STUDENTS have access to 244,000-volume Libra



WEST VIRGINIA UNIVERSITY

THE SCHOOL OF

M E D I C I N E

and Curriculum in Medical Technology

**WEST VIRGINIA UNIVERSITY BULLETIN
ANNOUNCEMENTS OF 1953-54 SESSION**



MEDICAL STUDENTS learn to operate many instruments used in medical profession. Here, an electrocardiograph records electric currents generated by the heart.

ANNOUNCEMENTS OF

THE SCHOOL OF MEDICINE

1953 - 54 SESSION



WEST VIRGINIA UNIVERSITY BULLETIN

YEAR 1953

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
4	5	6	7	8	9	10	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5	6	7	8	9	10	11
11	12	13	14	15	16	17	8	9	10	11	12	13	14	8	9	10	11	12	13	14	12	13	14	15	16	17	18
18	19	20	21	22	23	24	15	16	17	18	19	20	21	15	16	17	18	19	20	21	19	20	21	22	23	24	25
25	26	27	28	29	30	31	22	23	24	25	26	27	28	22	23	24	25	26	27	28	26	27	28	29	30		
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
3	4	5	6	7	8	9	1	2	3	4	5	6	7	1	2	3	4	5	6	7	2	3	4	5	6	7	8
10	11	12	13	14	15	16	7	8	9	10	11	12	13	5	6	7	8	9	10	11	9	10	11	12	13	14	15
17	18	19	20	21	22	23	14	15	16	17	18	19	20	12	13	14	15	16	17	18	16	17	18	19	20	21	22
24	25	26	27	28	29	30	21	22	23	24	25	26	27	19	20	21	22	23	24	25	23	24	25	26	27	28	29
31							28	29	30					26	27	28	29	30	31		30	31					
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
6	7	8	9	10	11	12	4	5	6	7	8	9	10	1	2	3	4	5	6	7	6	7	8	9	10	11	12
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
27	28	29	30				25	26	27	28	29	30	31	29	30						27	28	29	30	31		

YEAR 1954

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1		1	2	3	4	5	6		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28							28	29	30	31			
31																				
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1		2	3	4	5	6	7		1	2	3	4	5	
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold-face type.

UNIVERSITY CALENDAR

1953

May 30, Saturday	Alumni Day
May 31, Sunday	Baccalaureate Exercises
June 1, Monday	Commencement Day
June 3, Wednesday	Registration for first term, Summer Session
June 4, Thursday	First classes, first term, Summer Session
July 4, Saturday	Independence Day, a holiday
July 14, Tuesday	Close of first term, Summer Session
July 15, Wednesday	Registration for second term, Summer Session
*July 16, Thursday	First classes, second term, Summer Session
August 21, Friday	Close of Summer Session
September 9, Wednesday to September 15, Tuesday	Freshman Week Program
September 14 and 15, Monday and Tuesday	Registration for first semester
September 16, Wednesday	First classes, first semester
October 13, Tuesday	Meeting of University Senate
November 9, Monday	Midsemester reports due
November 26, Thursday	Thanksgiving Day, a holiday
December 19, Saturday to January 3, Sunday, inclusive	Christmas recess

1954

January 18, Monday to January 23, Saturday, inclusive	Final examinations for first semester
February 1, Monday, and February 2, Tuesday	Registration for second semester
February 3, Wednesday	First classes, second semester
February 7, Sunday	West Virginia University Day
February 9, Tuesday	Meeting of University Senate
March 29, Monday	Midsemester reports due
April 16, Friday, to April 20, Tuesday, inclusive	Easter recess
May 11, Tuesday	Meeting of University Senate
May 22, Saturday, to May 28, Friday	Final examinations for second semester
May 29, Saturday	Alumni Day
May 30, Sunday	Baccalaureate Exercises
May 31, Monday	Commencement Day

*Classes will be held August 8 and 15.

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WEST VIRGINIA UNIVERSITY

MORGANTOWN

ESTABLISHED FEBRUARY 7, 1867

The Board of Governors

	TERM EXPIRES
K. DOUGLAS BOWERS, <i>President</i> , Beckley	1953
CHARLES E. HODGES, <i>Vice-President</i> , Charleston	1954
WILLIAM G. THOMPSON, Montgomery	1955
RAYMOND E. SALVATI, Huntington	1956
THOMAS E. MILLSOP, Weirton	1957
MRS. PAUL HAMMANN, Martinsburg	1958
E. G. OTEY, Bluefield	1959
T. L. HARRIS, Parkersburg	1960
A. C. SPURR, Fairmont	1961
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	
CHARLES T. NEFF, JR., <i>Executive Secretary</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State School of West Virginia University.

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Series 53, No. 7-1, January, 1953

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Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

IRVIN STEWART, LL.B., A.B., A.M., Ph.D., LL.D., *President of the University*
CHARLES THOMPSON NEFF, JR., A.B., LL.D., *Vice-president of the University*
EDNA ARNOLD, M.A., *Dean of Women*
CHARLES EDWARD BUTLER, M.A. IN L.S., *Librarian*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
J. EVERETT LONG, M.A., *Registrar of the University*
EDWARD JERALD VAN LIERE, B.A., M.S., M.D., Ph.D., Litt.D., F.A.C.P., *Dean and Professor of Physiology*

THE FACULTY

PROFESSORS

EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; Ph.D., University of Chicago, 1927; Litt.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; Ph.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1917; Ph.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy and Chairman of Committee on Admissions and Scholarship*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; Ph.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., Ph.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE, *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., Rochester, 1942; M.D., Vermont, 1951.

ASSOCIATE PROFESSORS

Cecil Benjamin Pride,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

*Part time. In private practice.

- THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*
B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.
- JOHN CLIFFORD STICKNEY, *Associate Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; Ph.D., University of Minnesota, 1940.
- ERNEST HARRY LUDWIG,** *Associate Professor of Bacteriology*
B.S., M.S., Ph.D., University of Pennsylvania, 1937, 1938, 1947.

ASSISTANT PROFESSORS

- GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.
- FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.
- MULLEN O. COOVER, *Assistant Professor of Biochemistry*
A.B., Shepherd State College, 1942; M.S., West Virginia University, 1947.
- JAMES THOMAS HICKS, *Assistant Professor of Pathology*
A.B., B.S., M.S., University of Pittsburgh, 1945, 1946; Ph.D., George Washington University, 1950.
- ARCHIE LEMUEL STARKEY, *Assistant Professor of Medicine (Physical Diagnosis) (Superintendent of Hopemont Sanitarium)*
B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.
- MYRON BERNSTEIN SLOMKA, *Assistant Professor of Pharmacology*
B.S., Columbia, 1946; B.A., M.S., Ph.D., State University of Iowa, 1948, 1950, 1952.
- H. SINCLAIR TAIT, *Assistant Professor of Psychiatry (Superintendent of Weston State Hospital)*
M.D.C.M. Dalhousie University, 1914; F.A.P.A., 1952.

INSTRUCTORS

- CARL EDWARD JOHNSON,* *Instructor in Medicine (Physical Diagnosis)*
A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.
- DONALD ATWOOD HERRING, *Instructor in Pharmacology*
B.S. in Pharmacy, Ohio State University, 1941.
- MAYNARD PRIDE,* *Instructor in Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve, 1939.
- WILLIAM AUGUST EHRCOTT,* *Instructor in Pathology*
B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.
- JOHN B. HYDE, *Instructor in Anatomy*
B.S., University of South Dakota, 1944.
- CHARLES MARION CANBY, *Instructor in Bacteriology*
A.B., Shepherd College, 1947; M.S., West Virginia University, 1949.
- CARROLL RAYBOURNE BALL, *Instructor in Histology*
B.A., M.S., University of Mississippi, 1947, 1948.

ASSISTANTS

- LEAR TWIGG POWELL, *Graduate Assistant in Biochemistry*
A.B., University of Denver, 1950.
- JAMES EDWARD EDWARDS, *Graduate Assistant in Physiology*
A.B., Harvard College, 1949; M.S., West Virginia University, 1951.
- ROBERT JOSEPH KUCHLER, *Assistant in Bacteriology*
B.S., M.S., University of Pittsburgh, 1950, 1952.
- JAMES FRANKLIN MARTIN, *Assistant in Bacteriology (Part time)*
A.B., West Virginia University, 1952.

LECTURERS

- ELDEN BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.

*Part time. In private practice.

**Leave of absence 1952-1953.

ROGER A. KENNEDY, *Lecturer in Public Hygiene (Monongalia County Health Officer)*
B.A., M.A., Cambridge University, 1923, 1924; M.D., Saint Thomas Hospital
Medical School, London, 1928.

TECHNICIANS

FABRY LIVINGSTONE HAWK, *Laboratory and X-Ray Technician in Pathology*
Registered Medical Technologist.
ALFRED HOWARD, *Animal Caretaker and Technician for the Departments of Physiology
and Pharmacology*
B.S., West Virginia University, 1949.
MARGARET FORD GRAY, *Technician in Anatomy and Histology*
B.S., West Virginia University, 1949. (Resigned.)
JOAN TIMMINS MALCOLM, *Tissue Technologist in Pathology (Part time)*
A.B., Fairmont State College, 1947

CLERICAL PERSONNEL

MILDRED F. FISHER, *Secretary to the Dean*
NAOMI ANN WADE, *Secretary and Record Clerk*
B.S., West Virginia University, 1951.
MARTHA J. MAYNARD, *Secretary in Bacteriology*
MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946.

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor
of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical
College, 1939.
CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate
Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
SAMUEL JOHN MORRIS, *Physician and Medical Adviser to the Department of Athletics*
M.D., University of Maryland, 1912.
HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
EDGAR FRANK HEISKELL, JR.,* *Assistant Physician*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University
Medical School, 1943.

NURSES

HELEN LOUISE KUDLA, R.N., *Nurse in the University Infirmary*
VIRGINIA C. PRIDE, R.N., *Nurse in the University Infirmary*
HELEN VEREB, *Nurses' Aide in the University Health Service*
TULA FLESHMAN, R.N., *Nurse in the University Infirmary*
LOUISE MEYER, R.N., *Nurse in the University Infirmary*
MARY ANDERSON, R.N., *Nurse in the University Infirmary*
DREMA MUSGROVE, R.N., *Nurse in the University Infirmary*

TECHNICIANS

FABRY LIVINGSTON HAWK, *Chief Technician in the University Health Service*
Registered Medical Technologist
PASQUALE GUGLIOTTA, *Assistant Technician (Part time)*
in the University Health Service

*Part time. In private practice.

CLERICAL PERSONNEL

HELEN CLARISSA O'NEILL, *Secretary in the University Health Service*

A.A. Immaculata College, 1936

ETHEL FEATHER ELLIS, *Receptionist in the University Health Service*

MARGARET ANNE WALTER, *Clerk in the University Health Service*

THE STANDING COMMITTEES

Executive: E. J. VAN LIERE (*chairman*), F. R. WHITTLESEY, and C. B. PRIDE.

Admissions and Scholarship: S. B. CHANDLER (*chairman*), C. K. SLEETH, M. L. HOBBS, and R. F. KRAUSE.

Library: S. B. CHANDLER (*chairman*), J. C. STICKNEY, C. K. SLEETH, M. O. COOVER, and J. T. HICKS.

Research, Fellowships, and Grants: D. W. NORTHUP (*chairman*), M. L. HOBBS, J. M. SLACK, E. J. VAN LIERE and R. F. KRAUSE.

Seminars: C. K. SLEETH (*chairman*), J. C. STICKNEY, E. J. VAN LIERE, and J. B. HYDE.

Clinical and Special Facilities: C. K. SLEETH (*chairman*), C. B. PRIDE, M. L. HOBBS, G. R. MAXWELL, F. R. WHITTLESEY, and J. J. LAWLESS,

Curriculum: C. K. SLEETH (*chairman*), E. H. LUDWIG, E. J. VAN LIERE, and T. W. WILLIAMS.

Student Loans and Scholarships: J. C. STICKNEY (*chairman*), E. J. VAN LIERE, T. W. WILLIAMS, J. B. HYDE, and J. T. HICKS.

Medical Technology: M. L. HOBBS (*chairman*), E. H. LUDWIG, R. F. KRAUSE, and E. J. VAN LIERE.

Policy: Heads of departments and the director of the University Health Service.

Graduate Study: J. M. SLACK (*chairman*), J. C. STICKNEY, and R. F. KRAUSE.

Social: J. C. STICKNEY (*chairman*), J. B. HYDE, J. T. HICKS, C. R. BALL, and M. O. COOVER.

Animal House: R. F. KRAUSE (*chairman*), J. C. STICKNEY, C. R. BALL and E. J. VAN LIERE.

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The School of Medicine as now organized had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. Degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

PROPOSED EXPANSION OF MEDICAL SCHOOL

The West Virginia Legislature in 1951 made provision for the expansion of the Medical School to include the four years required for the M.D. Degree. Training in dentistry and nursing also are to be included. It is too early to announce dates for the beginning of this program, inasmuch as the necessary planning and construction work will require many months. Until further announcement, the two-year curriculum will be continued as in recent years.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination, including blood tests, urinalysis, and chest X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes five physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped with about 20 beds and operated as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, located at Hopemont, Preston County, 40 miles from Morgantown, is approved by the American Medical Association for residency. It has 450 beds and is a hospital primarily for pulmonary diseases. A substantial number of beds, however, are set aside for purely medical and surgical cases. By a special arrangement between the superintendent and staff of the hospital and West Virginia University, the School of Medicine has access to the hospital for teaching purposes and the superintendent and members of the staff become University officials. This arrangement provides an excellent affiliation for instruction in examination of the sick, with particular reference to pulmonary diseases.

By special arrangements, students of the School of Medicine also have access to clinical facilities of the following institutions for instruction in physical diagnosis, medicine, and surgery: Monongalia General Hospital, with a bed capacity of 100; and Vincent Pallotti Hospital, a private general hospital with a bed capacity of 90.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from Vincent Pallotti Hospital, Monongalia General Hospital, and Hopemont Sanitarium. This arrangement materially augments the pathological museum, which already numbers about 1,400 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence, besides assuring authoritative records for medico-legal purposes.

BUILDINGS AND EQUIPMENT

The three-story Medical Building furnishes room for most of the School of Medicine. On the first floor are the offices of the Dean, a general lecture room, a reading and study room, and the pharmacological laboratory. On the second floor are laboratories for bacteriology and physiology. On the third floor are laboratories for gross and microscopic anatomy, a large lecture room, and the X-ray room. All departments have appropriate offices, technical rooms, and storage space. Embalming and cadaver storage rooms are in the basement. Quarters for experimental animals are provided in separate buildings.

The biochemical laboratory occupies rooms in the Chemistry Building. The department office is Room 430; communicating with it are three rooms used as stock and preparation rooms and for research.

The Department of Pathology occupies rooms on the second floor of the University Health Center; a good-sized laboratory-lecture room and the necessary rooms for a museum, preparations, storage, offices, and private laboratories.

LIBRARY

The Medical Library is not organized as a separate unit but is housed in the University Library, where publications of prime importance to the students and faculty of the School of Medicine are to be found in close proximity to related biological and chemical publications. Purely chemical works, many of which are of interest in medicine, are housed in the Chemistry Building which is adjacent to the Library. Additional current issues of essential medical journals and periodicals of general scientific interest are conveniently available in the students' lounge in the School of Medicine.

There are about 18,000 catalogued volumes in the Library which constitute the medical collection. Roughly half of these are bound volumes of periodicals; the remainder are textbooks and monographs concerned with pre-clinical fields for the most part but comprising also better representative works in internal medicine, surgery, gynecology, obstetrics, public health, hygiene, and history of medicine. Certain other publications are available on bibliofilm, for which reading facilities are offered in the Library and in the Department of Bacteriology. The Library has a subscription list of over 150 leading medical journals. Various departments of the School of Medicine receive a number of special journals, and the Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

The Library maintains an inter-library loan system whereby materials not contained in the Library may be borrowed from the Surgeon General's Library, Library of Congress, or other libraries. Complete sets of various abstracting journals, including the Quarterly Cumulative Index Medicus, may be found in the general reading room of the Library. Library service is available to physicians of the state through loans of publications or through the furnishing of photostatic copies of articles.

A committee from the faculty of the School of Medicine is active in the interests of the Medical Library.

LIVING ACCOMMODATIONS

The University maintains three large dormitories, one for men and two for women. Cost of room and board in all dormitories ranges from \$459 to \$549 per academic year of 9 months. The University reserves the right to change these rates as necessity demands. For information as to accommodations and rates, address the office of the Business Director of Residences, West Virginia University, Morgantown.

Medical students, in the main, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the dormitories. For further information concerning houses on the approved list, men should address the Office of Off-Campus Housing, Room 207, Administration Building, West Virginia University, Morgantown. Women should communicate with the office of the Dean of Women, West Virginia University, Morgantown.

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. Registration fees for residents are \$285; for nonresidents, \$700 per academic year. There is an annual breakage deposit of \$10, part of which is usually returned at the end of the year. The total legitimate cost of a nine-month session for medical students in residence will range from \$1,000 to \$1,500 exclusive of traveling expenses. The School of Medicine furnishes microscopes for students without charge.

LOANS

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, others available to students of all colleges in the University. For information about loans, inquiries should be made to Director Joseph C. Gluck, Committee on Prizes, Scholarships, and Loan Funds, West Virginia University, Morgantown.

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 P.M. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association; however, they exceed the minimum standards of those associations.

All applications for admission are passed upon by the Committee on Admissions of the School of Medicine, composed of members of the medical faculty. Admission is by recommendation of this committee and with the approval of the Dean of the School.

The number of students that can be accommodated is strictly limited. In recent years the number of applicants has been so great that only residents of West Virginia can be considered, and of these only a small percentage can be admitted. Those admitted are the applicants who, in the judgment of the Committee on Admissions, are best qualified for the study of medicine, and who give highest promise of full service in the practice of medicine. Recently the number of applicants has been so great that the School could not accommodate all who were reasonably well qualified.

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must have credit for at least 15 units of high-school work. This must include four units of English,¹ two of mathematics (algebra, one, and plane geometry, one), and other subjects as specified in the general admission requirements of the University. The School of Medicine strongly urges two units of Latin.

COLLEGE CREDITS REQUIRED

The applicant must have credit for at least three years in a college of recognized standing. This credit must total at least 90 semester hours exclusive of military and physical education.

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which it approves for premedical education. Medical schools must give preference to applicants from institutions on this list. Schools may accept students from other institutions only when they show evidence of superior ability, as indicated by adequate credits and superior grades. Students planning premedical work should consult the School of Medicine or other authentic source for information about approved colleges.

Credits submitted by applicants for work done elsewhere than in West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

- A. REQUIRED SUBJECTS: The following subjects and hours are *minimum* requirements:
English Composition and Rhetoric 6 hr.
Biological Sciences 15 hr.

Must include General Zoology (preferable)—8 hours or General Biology—8 hours. Comparative Vertebrate Anatomy and, if possible, Vertebrate Embryology. Parasitology and Genetics are suggested electives. Human Anatomy, Physiology, Histology, or Bacteriology are not accepted as part of required hours and are not useful electives.

¹Students who present only 3 units of English may satisfy this requirement by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition.

<i>Chemistry</i>	20 hr.
Must include inorganic chemistry, 8 hours; quantitative analysis, 3 hours; physical chemistry (preferred) or qualitative analysis, 3 hours; and organic chemistry (aliphatic and aromatic), 6 hours. Physiological chemistry is not acceptable.	
<i>Physics</i>	8 hr.
<i>Psychology</i>	3 hr.
<i>A Modern Foreign Language</i>	12 hr.

German or French preferred. Must be in one language. Two units in high school are accepted as 6 hours of the requirement.

B. ELECTIVES: Other subjects to make the required 90 hours. In choosing electives, the premedical student should plan to secure a broad education, including adequate work outside the required sciences. Students should avoid courses which are in any sense a duplication or preview of courses given in Medical School. The following are suggested:

Mathematics—College algebra and trigonometry, while not absolute requirements, are looked upon with high favor by the Committee on Admissions. These subjects should be taken in the freshman premedical year because of their great usefulness in the study of physics and chemistry. Analytical geometry and calculus are of advantage to those students who can include them in their program.

Latin: Either high school or college Latin is strongly urged. It will be of great value.

Other Desirable Subjects: Art (drawing), botany, economics, geology, Greek, history, speech, political science, and sociology.

OTHER ITEMS CONCERNING ELIGIBILITY FOR ADMISSION

Excellence of Premedical Scholarship

The quality of premedical scholarship is the best single criterion of probable success in the study of medicine. For this reason applicants with higher grades are given preference. Students with "average" premedical grades have only a small chance of doing satisfactory work in the School of Medicine even if admitted. An excess of credit hours or higher degrees do little to offset the disadvantage of low grades in securing admission to medical schools.

Medical College Admission Test

The score on this test is used as one criterion of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service of Princeton, New Jersey. Tests are announced for May 9 and November 2, 1953. It is of advantage to applicants to take the test in May, inasmuch as many acceptances will be issued before the November scores are available. Students should consult premedical advisers about making application more than a month in advance of the announced dates.

Residence

Preference is given to residents of West Virginia. For several years resident applicants have been so numerous that there have been no places available for nonresidents.

Personal Attributes

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Persons who have been out of college for some years, or who are several years older than the average applicant, are admitted only when they show unmistakable evidence of superior ability and training. Good health is a necessary qualification.

Previous Failures

Applicants who have been subject to suspension from this or other medical schools can be admitted only in exceptional cases, when the Committee on Admissions considers such readmission justified.

When to Apply for Admission

Application for admission in September 1954 should be made promptly upon completion of the school year 1952-53 (June 1953). Applications will be considered until the class is filled, but early application is very advantageous.

How to Apply for Admission

Application for admission must be made upon blanks which may be obtained from the Dean's office upon request. A small unmounted photograph must accompany the application. The completed application should be returned promptly to the School of Medicine.

Credentials

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the School of Medicine, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the School of Medicine.

Recommendations

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, two instructors in different science departments to send letters of recommendation to the School of Medicine. A letter from the family physician is useful.

Notification of Applicants

All applicants will be informed of the action of the Committee on Admissions as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

PREMEDICAL CURRICULUM AT WEST VIRGINIA UNIVERSITY

In keeping with the need for good premedical training, West Virginia University, through its premedical adviser, maintains careful supervision over those students who have declared their intention of preparing for the study of medicine. It is not the policy of West Virginia University to give special premedical courses but rather to maintain a well-balanced curriculum composed of courses regularly scheduled in various departmental offerings.

This curriculum does not involve extensive specialization in any subject. There are no majors and minors. High specialization in one subject probably is not the best preparation for the average student. The curriculum includes as requirements those subjects which are needed for entrance to medical schools, but it also allows wide latitude in choice of electives in other departments so that the student may gain some insight into the various fields of knowledge in which all educated persons should be versed.

REGISTRATION

All medical students are expected to register at the Medical Building on the days set apart for registration at the beginning of each semester as announced in the calendar on page 3.

No student will be permitted to register in the School of Medicine after the first week of classes.

Persons who are not registered as students in the University and who are not members of the administrative or teaching staffs shall not be admitted to regular attendance in School of Medicine classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Scholarship Committee and the professor in charge of the course.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Scholarship Committee of the School of Medicine. This permission is not valid until it has been reported to the Registrar for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the Medical School during the semester should do so in regular manner. Consult the Dean's office for steps which must be taken.

FEES

All fees are due and payable at the office of the Comptroller on the day of registration.² Students registering in the School of Medicine pay the following:

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of registration in the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant. The deposit paid by students under the G.I. Bill of Rights will be refunded after the full tuition for the semester has been paid.

TUITION AND OTHER FEES

	Residents ⁴	Non-Residents ⁴
Full-time students ³ (per semester) Tuition	\$ 87.00	\$308.00
University Fees	42.00	42.00
Total	\$129.00	\$350.00
Part-time students (per semester hour) ³	8.00	20.00

Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4 per credit hour in addition to the fee charged in the college or school in which they are registered.

Breakage deposit (for year) \$10.00

Breakage deposit for University students not regularly enrolled in medical school, for one laboratory course, \$5, and for more than one course, \$10.

SPECIAL FEES

Late registration ⁵	\$ 2.00
Graduation fee ⁶	10.00
Student's record fee ⁷	1.00

²Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

³A full-time student is one who is registered for 10 or more semester hours during a semester. A part-time student is one who is registered for fewer than 10 semester hours per semester.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding his registration. No nonresident student may establish domicile in this State, entitling him to reductions or exemptions of tuition, merely by his attendance at the University. A minor student whose parents have become domiciled in West Virginia after the student's original registration in the University will be deemed to have the domicile of his parents and be entitled to pay resident fees thereafter. Moreover, any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State, at least twelve months prior to his reregistration in the University. In any event, the appointment of a guardian for a minor student temporarily resi-

REFUNDING OF FEES

Fees will be refunded according to the following schedule to students who withdraw regularly from the University.

	Amount of Refund
During the first and second weeks	All fees less \$2.50
During the third and fourth weeks	80% of fees
During the fifth and sixth weeks	60% of fees
During the seventh and eighth weeks	40% of fees
Beginning with ninth week	No refunds allowed

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

- A—excellent—given only to students of superior ability and attainment
- B—good—given to those students who are well above average but who are not in the highest group
- C—fair—average students
- D—poor but passing
- I—incomplete
- F—failure
- W—all withdrawals prior to end of second week following date for mid-semester reports
- WP—withdrew passing
- WF—withdrew failing
- FIW—failure because of irregular withdrawal
- X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF," "FIW"—0. When the grade of "I" becomes converted into a grade carrying credit, the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Scholarship. (University Rule.)

For Medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

dent in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

⁵Charged to students who do not procure class cards during the regular registration days set forth in the calendar on page 3.

⁶The graduation fee is payable by all students at the beginning of the semester or term in which they expect to receive their degrees or diplomas.

⁷One transcript of a student's record is furnished by the Registrar without charge. This fee is charged for furnishing an additional transcript.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Scholarship Committee.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

PROMOTIONS AND SUSPENSIONS

The Committee on Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Scholarship Committee.

1. Students must register for all courses scheduled for each semester.

2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).

3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.

4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia, as noted on page 9.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

Proficiency in English. The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their college work after June 1, 1952. Students in Medicine and Medical Technology who have not satisfied this requirement must take this examination in their first semester of registration in the Medical School.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. Medical students may work toward this degree by study during four summer terms (two full summers.) For fuller information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements of the Graduate School*.

Only a small number of graduate students can be accommodated in departments of the School of Medicine. Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

SCHEDULE OF COURSES FOR 1953-54

COURSE	HR. PER WEEK			HR. PER SEMESTER			SEMESTER CREDIT HOURS
	Lect.	Lab.	Total	Lect.	Lab.	Total	
FIRST YEAR — FIRST SEMESTER							
Gross Anatomy 201	2	8	10	32	128	160	6
Histology 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	9	13	64	144	208	7

FIRST YEAR — SECOND SEMESTER

Gross Anatomy 202	3	6	9	48	96	144	5
Neuroanatomy 203	3	6	9	48	96	144	5
Medical Bacteriology 221	3	9	12	48	144	192	6
Physiology 242	2	3	5	32	48	80	3

SECOND YEAR — FIRST SEMESTER

Hygiene 222	2	0	2	32	0	32	2
Physiology 243	5	6	11	80	96	176	7
Gen. and Tumor Pathology 251	5	9	14	80	144	224	7
Pharmacodynamics 262	3	0	3	48	0	48	3
Physical Diagnostic 271	1	0	1	16	0	16	*
Introductory Medicine 272	0	2	2	0	32	32	*
Psychobiology 273	1	0	1	16	0	16	1
Biostatistics 274	1	0	1	16	0	16	1

SECOND YEAR — SECOND SEMESTER, FIRST HALF

Applied Anatomy 204	2	4	6	16	32	48	2†
Special Pathology 252	1	2	3	8	16	24	§
Clinical Pathology 254	2	4	6	16	32	48	§
Medical Pharmacology 263	4	6	10	32	48	80	§
Physical Diagnosis 271	1	2	3	8	16	24	§
Introductory Medicine 272	2	0	2	16	0	16	§
History of Medicine 275	1	0	1	8	0	8	0
Surgery, Principles of 281	2	0	2	16	0	16	§
Obstetrics 291	2	0	2	16	0	16	§

SECOND YEAR — SECOND SEMESTER, SECOND HALF

Special Pathology 252	2	2	4	16	16	32	2
Clinical Pathology 254	3	7	10	24	56	80	3
Medical Pharmacology 263	3	3	6	24	24	48	4
Clinical Anesthesiology 264	1	0	1	8	0	8	0
Physical Diagnosis 271	2	2	4	16	16	32	3
Introductory Medicine 272	2	2	4	16	16	32	3
History of Medicine 275	1	0	1	4	0	4	0
Surgery, Principles of 281	2	2	4	16	16	32	2
Obstetrics 291	2	0	2	16	0	16	2

*Course continues throughout the year.

†Course completed at mid-semester.

§Course continues throughout the semester.

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

8	9	10	11	12	1	2	3	4	5
Biochemistry						Histology			
Gross Anatomy						Histology			
Biochemistry						Gross Anatomy			
Gross Anatomy			Biochem.			Histology			
Biochemistry						Histology			

FIRST YEAR—SECOND SEMESTER

8	9	10	11	12	1	2	3	4	5
Neuroanatomy			G. Anat.			Bacteriology			
Gross Anatomy						Physiology			
Neuroanatomy			Physiol.			Bacteriology			
Gross Anatomy						Bacteriology			
Neuroanatomy			Physiol.			Bacteriology			

SECOND YEAR—FIRST SEMESTER

8	9	10	11	12	1	2	3	4	5
Pharm.	Physiol.	Medicine				Pathology			
Pathology			Physiol.			Physiology			
Pathology		Hygiene	Physiol.			Pathology			
Pharm.	Physiol.	Biostat.	Psychobiol.			Physiology			
Pharm.	Phys. Diag.	Hygiene	Physiol.			Pathology			

SECOND YEAR—SECOND SEMESTER, FIRST HALF

8	9	10	11	12	1	2	3	4	5
Pharm.	Obstetrics	Cl. Path.	Phys. Diag.			Pharmacology			
Pharm.	Medicine	Hist. Med.	Surgery			Applied Anatomy			
Medicine	Pharm.	Clinical Pathology				Pharmacology			
Pharm.	Cl. Path.	Obstet.	Surgery			Applied Anatomy			
Physical Diagnosis		Clinical Pathology				Pathology			

SECOND YEAR—SECOND SEMESTER, SECOND HALF

8	9	10	11	12	1	2	3	4	5
Medicine or Surgery		Cl. Path.	Obstet.			Pathology	Hist. Med.	Anesth.	
Medicine or Surgery		Pharm.	Surgery			Clinical Pathology			
Medicine	Phys. Diag.	Pathology				Pharmacology			
Medicine	Phys. Diag.	Pharm.	Surgery			Clinical Pathology			
Physical Diagnosis		Pharm.	Obstet.			Clinical Pathology			

COURSES OF INSTRUCTION

For convenience each course is designated by the name of the department and the number of the course. The plan for numbering courses in West Virginia University is as follows:

- Courses 1 to 99—courses primarily for freshmen and sophomores.
- Courses 100 to 199—courses open to juniors and seniors.
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates.
- Courses 300 to 399—courses open to graduates only.

The following abbreviations are used in the announcements of courses:

- I—a course offered during the first semester.
- II—a course offered during the second semester.
- I, II—a semester course offered each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course offered during the summer term.
- hr.—number of semester hours credit per course.
- Conc.—concurrent.

NOTE—Courses marked “*” are required of first-year students; those marked “†” are required of second-year students.

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information see *Announcements of the Graduate School*.

ANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructors HYDE and BALL

- 201.* GROSS ANATOMY. I. 6 hr. Gross structure of the human body, including pertinent aspects of embryonic development. PR: General Zoology. Comparative Anatomy and Embryology desirable. Lecture, 2 hr. per week; lab., 8 hr.
- 202.* GROSS ANATOMY. II. 5 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 3 hr. per week; lab., 6 hr.
- 203.* NEUROANATOMY. II. 5 hr. PR: Anatomy 201. Structure of the gross and microscopic nervous system with notes on its embryonic development. Lecture 3 hr. per week; lab. 6 hr.
- 204.† APPLIED ANATOMY. II. 2 hr. PR: Anatomy 201, 202, 203, and Embryology 206. Lecture, 2 hr. per week; lab., 4 hr. during first half of semester.
- 205.* HISTOLOGY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. Histological structure and elementary embryology of tissues and organs. Lecture, 3 hr. per week; lab., 9 hr.
- 211. ANATOMY OF THE SYMPATHETIC NERVOUS SYSTEM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
- 212. APPLIED ANATOMY OF THE PELVIS AND PERINEUM. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
- 213. SPECIAL PROBLEMS IN VASCULARIZATION. I or II. 2-5 hr. PR: Histology 205 or its equivalent. The analysis of vascular beds and their relation to tissues and organs. Laboratory. Hours to be arranged.
- 214. ADVANCED HISTOLOGY. I or II. 2-5 hr. PR: Histology 205 or equivalent. Special problems in microscopic anatomy. Hours to be arranged.

215. ADVANCED EMBRYOLOGY. I or II. 2-5 hr. Topics to be chosen to meet special needs of students. Hours to be arranged. Open to properly qualified students.
301. ADVANCED ANATOMY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.
311. RESEARCH IN MICROSCOPIC OR DEVELOPMENTAL ANATOMY. I or II or Yr. 2-5 hr. Hours to be arranged. Open to properly qualified students.

BACTERIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Associate Professor LUDWIG; Instructor CANBY; Lecturer KENNEDY; Assistant KUCHLER

220. PATHOGENIC BACTERIOLOGY. I, S. 5 hr. PR or Conc.: Chemistry 131 (Organic Chemistry). For student in Medical Technology and Pharmacy. Detailed study of microorganisms with emphasis on those causing human diseases. Lecture, 2 hr. per week; lab., 8 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.* MEDICAL BACTERIOLOGY. II. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry). Biochemistry 231 desirable. Detailed study of pathogenic microorganisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr.
- 222.* PUBLIC HYGIENE. I. 2 hr. PR: Consent of instructor. Introduction into the principles of public health. Lecture 2 hr. per week.
224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.
- 320, 321. ADVANCED BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsia, and viruses. Graduate students only.
- 323, 324, 325, 326. RESEARCH IN BACTERIOLOGY. I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professor COOVER; Assistant POWELL

139. GENERAL BIOCHEMISTRY. II. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics and Medical Technology. Open to other qualified students.
230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.
- 231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab., 9 hr.
237. SEMINAR IN BIOCHEMISTRY. Yr. 2 hr. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.
- 330, 331. BIOCHEMICAL PREPARATIONS. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.
- 333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

- 275.† HISTORY OF MEDICINE. II. No Credit. A brief history of the development of the science and art of medicine. Lecture, 2 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, STARKEY and TAIT; Instructor JOHNSON

- 271.† PHYSICAL DIAGNOSIS. Yr. 3 hr. Lecture, 1 hr. per week during first semester; lecture, 1 hr. per week, lab., 2 hr. during first half of second semester; lecture, 2 hr. per week, practical work with patients, 2 hr. during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 272.† INTRODUCTORY MEDICINE. Yr. 3 hr. Medical clinic—demonstration of clinical cases, 2 hr. per week during first semester; lecture, 2 hr. per week during first half of second semester; lecture, 2 hr. demonstration of clinical cases, 2 hr. per week during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 273.† PSYCHOBIOLOGY. I. 1 hr. Introduction to the study of human personality, normal and abnormal. Lecture, 1 hr. per week.
- 274.† BIOSTATISTICS. I. 1 hr. Planned to aid in the understanding of the statistical methods commonly used in medical and biological work, and in the evaluation of experimental data in these fields. Lecture, 1 hr. per week.

OBSTETRICS

Professor VAN LIERE

- 291.† OBSTETRICS. II. 2 hr. PR: Anatomy 201, 202 (Human Anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor HICKS; Instructor EHNGOT; Assistant MALCOLM

151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† GENERAL AND TUMOR PATHOLOGY. I. 7 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† SPECIAL PATHOLOGY. II. 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture 2 hr. per week, lab., 2 hr. during second half of semester.
- 254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.
256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Assistant Professor SLOMKA; Instructor HERRING; Lecturer TUCKER

160. FUNDAMENTALS OF PHARMACOLOGY. II. 1 hr. PR or Conc.: Physiology 141. For students in the College of Pharmacy. Lecture 1 hour per week.
161. PRACTICAL PHARMACOLOGY. I. 4 hr. PR: Pharmacology 160. For students in the College of Pharmacy. Lecture 3 hours per week; lab., 3 hours.
- 262.† PHARMACODYNAMICS. I. 3 hr. PR: Physiology 141 or 242. Lecture, 3 hr. per week. The mechanism of action of drugs on living things. The fundamental relationships between drugs and drug action.
- 263.† MEDICAL PHARMACOLOGY. II. 4 hr. PR: Pharmacology 262. Lecture, 4 hr. per week, lab., 6 hr. first half of semester; lecture, 3 hr. per week, lab., 3 hr. second half of semester. The action of drugs commonly used clinically for man and animals.
- 264.† CLINICAL ANESTHESIOLOGY. II. No credit. PR: registration in Pharmacology 263. 1 hr. per week second half of semester. Practical demonstrations of anesthesia.
266. BIOCHEMORPHOLOGY. II. 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. ANESTHESIOLOGY. I, II, S. 3 hr. PR: Physiology 243. Production of surgical anesthesia in man. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP and VAN LIERE; Associate Professor STICKNEY; Assistant EDWARDS

141. ELEMENTARY PHYSIOLOGY. II. 4 hr. PR: Biology 1, 2 or Zoology 1, 2, Chemistry 131 (Organic Chemistry) (or Conc.) For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr.
- 242.* PHYSIOLOGY. II. 3 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology of muscle and nervous system. Lecture, 2 hr. per week; lab 3 hr.
- 243.† PHYSIOLOGY. I. 7 hr. PR: Same as for Physiology 242. Physiology of circulation, respiration, digestion, metabolism, secretion, endocrines, special senses. Lecture, 5 hr. per week; lab., 6 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.

- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE

- 281.† PRINCIPLES OF SURGERY. II. 2 hr. Lecture, 2 hr. per week during the first half of semester; lecture, 2 hr. per week during second half of semester, demonstrations of clinical cases and operative technique, 2 hr.

MEDICAL STUDENTS 1952 - 53

FIRST-YEAR STUDENTS (ENTERED SEPTEMBER 1952)

Anvil, Donald Keith (A.B., West Virginia University, 1952)	Parsons
Bailey, Shirley Joe (A.B., West Virginia University, 1952)	Cedar Grove
Bauer, William (A.B., West Virginia University, 1952)	Omar
Blake, Charles Richard (A.B., West Virginia University, 1952)	St. Marys
Browning, Richard James	Huntington
Canada, William Hammond	Huntington
Crimm, Carl Eugene	Clarksburg
Daniel, Charles Richard (A.B., West Virginia University, 1952)	Beckley
Deardorff, William Alva (A.B., West Virginia University, 1952)	Charleston
Dickerson, Kenneth Hoyt (B.S., Marietta College, 1952)	Ravenswood
Dunlap, Frank Edward (A.B., West Virginia University, 1952)	St. Albans
Dye, Robert Arthur (A.B., West Virginia University, 1949)	Morgantown
Fike, Robert Hamstead (A.B., West Virginia University, 1952)	Morgantown
Garretson, William Blaine (B.S., Concord College, 1951)	Stephenson
Groves, Donald Stewart (A.B., West Virginia University, 1949)	Summersville
Halki, John Joseph (B.S. Pharm., West Virginia University, 1950)	Morgantown
Harman, Chester Doan (A.B., Bridgewater College, 1952)	Onego
Harper, William Hale (A.B., West Virginia University, 1952)	Elkins
Horne, Andrew Ferree (B.S., Davidson College, 1951)	Welch
Humphries, David Scott (B.S., Wake Forest College, 1951)	Beckley
Ingram, Marion Ellis (B.S., Davis and Elkins College, 1952)	Elkins
Lawson, William Junior	Monongah
May, Boyd Hickman	Elkins
Miles, Robert Lyle	Wheeling
Musselman, Laurence Ketler (A.B., West Virginia University, 1952)	Charleston
Perkins, Robert Louis	Clarksburg
Ripley, Gary Lemasters (B.S., Marshall College, 1952)	Huntington
Sams, James Caldwell	Huntington
Short, Joan Kalaine	Kopperston
Smith, Larry Click (A.B., Bridgewater College, 1951)	Crum
Taylor, Leonard Edward (B.S., Concord College, 1952)	Princeton
Terezis, Nick L.	Wheeling

SECOND-YEAR STUDENTS (ENTERED SEPTEMBER 1951)

Battagliino, John Joseph, Jr. (B.S., Concord College, 1951)	Bluefield
Bell, William Edward (A.B., West Virginia University, 1951)	Morgantown
Blethen, Harry Samson, Jr. (A.B., West Virginia University, 1951)	Huntington
Bradford, John David (A.B., West Virginia University, 1951)	Grafton
Cokeley, John McMillen	Morgantown
Cooper, Reginald Rudvard (A.B., West Virginia University, 1952)	Dry Fork
Edwards, James Edward (A.B., Harvard College, 1949)	Montgomery
Goodno, John Alden, Jr. (A.B., Marietta College, 1951)	Huntington
Jackson, Harry Arden (A.B., West Virginia University, 1951)	Gassaway
LaNeve, Ralph James (A.B., West Virginia University, 1952)	Newell
Lantz, Donald Ross (B.S., Marietta College, 1951)	Parkersburg
Meckley, Arnold Hugh (A.B., West Virginia University, 1951)	Elkview
Myles, John Turpin (A.B., West Virginia University, 1952)	Fayetteville
Pickett, David Lee (B.S., Denison University, 1951)	Moundsville
Powell, Douglas Oxley (B.S., Marshall College, 1951)	Huntington
Provins, Austin Andrew (A.B., West Virginia University, 1951)	Morgantown
Riley, William Joseph (A.B., West Virginia University, 1952)	Spencer
Sadler, William Samuel (B.S., Marshall College, 1951)	Barboursville
Sheppard, Mark, Jr.	Barrackville
Silverman, Howard Ayres (A.B., West Virginia University, 1952)	Beckley
Sinclair, William Paige	Wheeling
Smouse, William Reed (A.B., West Virginia University, 1951)	Fairmont

Solan, George Miley (B.S., The American University, 1950)	Moorefield
Stone, Robert Earl (B.S., Marshall College, 1951)	Logan
Stubbs, Bernard Francis	Wheeling
West, Wilk Otis (B.S., Concord College, 1952)	Princeton
Westfall, Arlie Harold (B.S., Fairmont State College, 1950)	Enterprise
Winkler, Charles Pinckney	Ronceverte
Winkler, Moseley Hubbard	Ronceverte

II. Curriculum in Medical Technology

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, etc., and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association, which inspects, evaluates, and approves schools. This School is included in the list of those approved by the American Medical Association. In this field, properly qualified persons, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, occupies two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser. Four years in all are required for the degree.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*
R. F. KRAUSE (Professor of Biochemistry)
E. H. LUDWIG (Assistant Professor of Bacteriology)
E. J. VAN LIERE (Dean of Medical School)

REQUIREMENTS FOR ADMISSION

HIGH SCHOOL CREDITS REQUIRED

For admission to the curriculum in Medical Technology the applicant must have credit for at least 15 units of high school work. This must meet the requirements for admission to West Virginia University in the College of Arts and Sciences, including subjects specified in the *University Catalog*. In addition, one unit of plane geometry is desirable.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 semester hours, exclusive of military science, as specified below:

English. 12 semester hours. (Must include 6 hours composition and rhetoric, and 6 additional hours in literature.)

Modern Foreign Language. 12 hours.

Biological Science. 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry. 15 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 3 hours; qualitative analysis or physical chemistry, 4 hours.)

Physics. 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Students should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry or comparative anatomy.

Military training is required of all freshman and sophomore men in West Virginia University.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms obtainable from the School of Medicine. These must be presented at the Office of the Dean of the School. Application should be made in February of the second pre-technology year and they will be considered after April 1. At the time of making application the student, unless in residence at West Virginia University, should request the registrar of his college to send an official transcript of his work to the Medical School.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the Medical School.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in making selection of students. Applicants from other institutions should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

FEES

Students in Medical Technology pay the following fees: For full time students, \$67 per semester for residents of West Virginia and \$142 for nonresidents; for the summer of the senior year, \$5 for residents and \$7 for nonresidents. There is a breakage deposit of \$10 per year. The graduation fee of \$10 is payable at the beginning of the final semester. Students not registered in the Medical School or the College of Pharmacy pay \$4 per credit hour for courses taught by members of the medical faculty in addition to the regular fee for the college in which registered.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

STANDARDS OF SCHOLARSHIP

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year with a grade-point average of 1.5 per registration hour.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During this year, students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Pathogenic bacteriology (220)	5	Elementary physiology (141)	4
Organic chemistry (131)	4	General biochemistry (139)	4
Comparative anatomy (231)	5	Parasitology (255)	4
Electives	3	Clinical laboratory diagnostic methods (151)	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygiene Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

STUDENTS IN MEDICAL TECHNOLOGY

JUNIOR YEAR

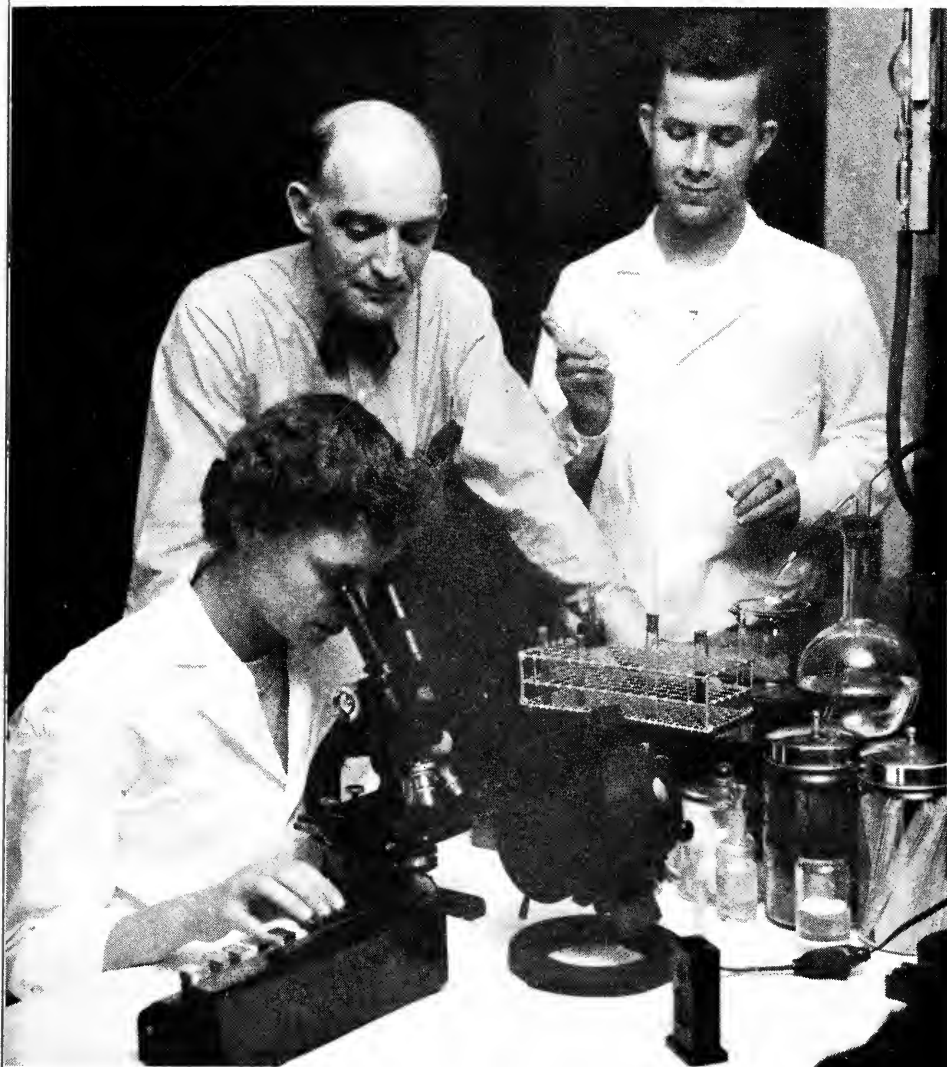
Bess, Margaret Johnson	Piedmont
Campbell, Phyllis Jean	Fairmont
Furrie, Winifred Claire	Brownsville, Pa.
Hartsfield, Patricia Anne	Keyser
Hathaway, Patricia Ann	Grantsville
Kisner, Ruth Josephine	Terra Alta
Loizos, Frances	Martinsburg
Meeks, Suzanne Virginia	Morgantown
Morton, Carolyn Ellen	Sutton
Pugh, Joanne Hoff	Lillybrook
Smithson, Edna Jeanne	Huntington
Weber, Judith Tierney	Weston

SENIOR YEAR

Bowers, Lois Jean	Brushy Run
Farmans, Rosaline	Weirton
Grose, Glenna Mae	Alderson
Hill, Ruth Ann	Fairmont
Lane, Marilyn Jolly	Elm Grove
Lantz, James Jacob	Pine Grove
Oliver, Erma Lee	Shinnston
Pallotta, Mary Agnes	Richwood
Samuel, Greta Ann	Clarksburg
Sikora, Delores Theresa	Weirton
Stevens, Dorothea Ann	Dunbar

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MEDICAL TECHNOLOGY majors use modern equipment under close supervision. Students get 6 months training in hospitals, 3 months in State Dept. of Health labs.



LIBRARY, recently expanded and redecorated, provides facilities for medical students, including complete library services and reading rooms.



WEST VIRGINIA UNIVERSITY

THE SCHOOL OF **MEDICINE**
and Curriculum in Medical Technology

WEST VIRGINIA UNIVERSITY
ANNOUNCEMENTS OF 1954-55 SESSION

YEAR 1954

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1		1	2	3	4	5	6		1	2	3	4	5	6					1	2	3	
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
24	25	26	27	28	29	30	28							28	29	30	31				25	26	27	28	29	30		
31																												
MAY							JUNE							JULY							AUGUST							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1			1	2	3	4	5			1	2	3				1	2	3	4	5	6	7
2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14	
9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	
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30	31																											
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1							1		1	2	3	4	5	6			1	2	3	4		
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19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	
26	27	28	29	30			24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31		
							31																					

YEAR 1955

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5			1	2	3	4	5
2	3	4	5	6	7	8	6	7	8	9	10	11	12	6	7	8	9	10	11	12
9	10	11	12	13	14	15	13	14	15	16	17	18	19	13	14	15	16	17	18	19
16	17	18	19	20	21	22	20	21	22	23	24	25	26	20	21	22	23	24	25	26
23	24	25	26	27	28	29	27	28						27	28	29	30	31		
30	31																			
APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1	1	2	3	4	5	6	7			1	2	3	4	
3	4	5	6	7	8	9	8	9	10	11	12	13	14	5	6	7	8	9	10	11
10	11	12	13	14	15	16	15	16	17	18	19	20	21	12	13	14	15	16	17	18
17	18	19	20	21	22	23	22	23	24	25	26	27	28	19	20	21	22	23	24	25
24	25	26	27	28	29	30	29	30	31					26	27	28	29	30		

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold-face type.

UNIVERSITY CALENDAR

1954

May 29, Saturday Alumni Day
May 30, Sunday Baccalaureate Exercises
May 31, Monday Commencement Day
June 2, Wednesday Registration for first term, Summer Session
June 3, Thursday First classes, first term, Summer Session
July 5, Monday (July 4, Sunday, Independence Day) A holiday
July 13, Tuesday Close of first term, Summer Session
July 14, Wednesday Registration for second term, Summer Session
July 15, Thursday First classes, second term, Summer Session
August 20, Friday Close of Summer Session
September 8, Wednesday to September 14, Tuesday Freshman Week Program
September 13 and 14, Monday and Tuesday Registration for first semester
September 15, Wednesday First classes, first semester
October 12, Tuesday Meeting of University Senate
November 2, Tuesday Election Day, a holiday
November 8, Monday Midsemester reports due
November 25, Thursday Thanksgiving Day, a holiday
December 18, Saturday to January 2, Sunday, inclusive Christmas recess

1955

January 14, Friday, to January 20, Thursday, inclusive
Final examinations for first semester
January 27, Thursday, and January 28, Friday Registration for second semester
January 31, Monday First classes, second semester
February 7, Monday West Virginia University Day
February 8, Tuesday Meeting of University Senate
March 21, Monday Midsemester reports due
April 8, Friday, to April 12, Tuesday, inclusive Easter recess
May 10, Tuesday Meeting of University Senate
May 21, Saturday, to May 27, Friday Final examinations for second semester
May 28, Saturday Alumni Day
May 29, Sunday Baccalaureate Exercises
May 30, Monday Commencement Day

*Classes will be held August 7 and 14.

WEST VIRGINIA UNIVERSITY

MORGANTOWN

ESTABLISHED FEBRUARY 7, 1867

The Board of Governors

	TERM EXPIRES
CHARLES E. HODGES, <i>President</i> , Charleston	1954
THOMAS E. MILLSOP, <i>Vice-President</i> , Weirton	1957
WILLIAM G. THOMPSON, <i>Secretary</i> , Montgomery	1955
RAYMOND E. SALVATI, Huntington	1956
MRS. PAUL HAMMANN, Martinsburg	1958
E. G. OTEY, Bluefield	1959
T. L. HARRIS, Parkersburg	1960
A. C. SPURR, Fairmont	1961
K. DOUGLAS BOWERS, Beckley	1962
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State College of West Virginia University.

West Virginia University Bulletin

Series 54, No. 10-3, April, 1954

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Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

IRVIN STEWART, LL.B., A.B., A.M., PH.D., LL.D., *President of the University*
EDNA ARNOLD, M.A., *Dean of Women*
CHARLES EDWARD BUTLER, M.A. IN L.S., *Librarian*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENER, B.A., *Acting Comptroller*
J. EVERETT LONG, M.A., *Registrar of the University*
EDWARD JERALD VAN LIERE, B.A., M.S., M.D., PH.D., LITT.D., F.A.C.P., *Dean and Professor of Physiology*

THE FACULTY

PROFESSORS

EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; PH.D., University of Chicago, 1927; LITT.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; PH.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1917; PH.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy and Chairman of Committee on Admissions and Scholarship*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; PH.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., PH.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE,** *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; PH.D., Rochester, 1942; M.D., Vermont, 1951.
DANIEL THOMAS WATTS, *Professor of Pharmacology*, A.B., Elon College, 1937; PH.D., Duke University, 1942.

ASSOCIATE PROFESSORS

CECIL BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., PH.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

*Part time. In private practice.

**Leave of absence 1952-1953.

THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*
B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.

JOHN CLIFFORD STICKNEY, *Associate Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; Ph.D., University of Minnesota, 1940.

ASSISTANT PROFESSORS

GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.

FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.

MULLEN O. COOVER, *Assistant Professor of Biochemistry*
A.B., Shepherd State College, 1942; M.S., West Virginia University, 1947.

ARCHIE LEMUAL STARKEY,* *Assistant Professor of Medicine (Physical Diagnosis) (Superintendent of Hopewell Sanitarium)*

B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.

H. SINCLAIR TAIT,* *Assistant Professor of Psychiatry (Superintendent of Weston State Hospital)*

M.D.C.M. Dalhousie University, 1914; F.A.P.A., 1952.

RALPH GORDON SPEARS, *Assistant Professor of Bacteriology*

B.S., M.D., Northwestern University, 1947, 1951.

WILLIAM ENGLEHART COWELL, *Assistant Professor of Pathology*

A.B., B.S., West Virginia University, 1949; M.D., University of Colorado, 1951.

GORDON R. MCKINNEY, *Assistant Professor of Pharmacology*

A.B., DePauw University, 1946; M.S. Notre Dame University, 1948; Ph.D., Duke University, 1951.

INSTRUCTORS

CARL EDWARD JOHNSON,* *Instructor in Medicine (Physical Diagnosis)*

A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.

DONALD ATWOOD HERRING, *Instructor in Pharmacology*

B.S. in Pharmacy, Ohio State University, 1941.

MAYNARD PRIDE,* *Instructor in Surgery*

A.B., Marietta College, 1935; M.D., Western Reserve, 1939.

WILLIAM AUGUST EHRCOTT,* *Instructor in Pathology*

B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.

JOHN B. HYDE, *Instructor in Anatomy*

B.S., University of South Dakota, 1944.

CHARLES MARION CANBY, *Instructor in Bacteriology*

A.B., Shepherd College, 1947; M.S., West Virginia University, 1949.

CARROLL RAYBOURNE BALL, *Instructor in Histology*

B.A., M.S., University of Mississippi, 1947, 1948.

ROWLAND ELIZABETH LOGAN, *Instructor in Physiology*

A.B., University of California, 1945; M.S., Northwestern University, 1951.

ASSISTANTS

LEAR TWIGG POWELL, *Graduate Assistant in Biochemistry*

A.B., University of Denver, 1950; M.S., West Virginia University, 1953.

ROBERT JOSEPH KUCHLER, *Assistant in Bacteriology*

B.S., M.S., University of Pittsburgh, 1950, 1952.

PATRICIA O'CONNOR SANDERS, *Research Assistant in Biochemistry*

B.S., West Virginia University, 1952.

LECTURERS

ELDEN BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*

B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.

ROGER A. KENNEDY, *Lecturer in Public Hygiene (Monongalia County Health Officer)*

B.A., M.A., Cambridge University, 1923, 1924; M.D., Saint Thomas Hospital Medical School, London, 1928.

*Part time. In private practice.

TECHNICIANS

- FABRY LIVINGSTONE HAWK, *Laboratory and X-Ray Technician in Pathology*
Registered Medical Technologist.
- ALFRED HOWARD, *Animal Caretaker and Technician for the Departments of Physiology and Pharmacology*
B.S., West Virginia University, 1949.
- WILLIS G. LEMLEY, *Laboratory Technician in Anatomy*
A.B., West Virginia University, 1942.
- ROBERT LEE GODBY, *Tissue Technologist in Pathology*
A.B., B.S., West Virginia University, 1951, 1952.
- WILLIAM S. WOODROW, *Bacteriologist*
B.S., West Virginia University, 1952.
- ROSEANNE WHEELER, *Technician in Pathology*
A.B., Butler University, 1949; H.T., American Society Clinical Pathologists, 1950.
- JOHN EDWARD NUTTER, *Glassware Technician in Bacteriology*
B.S., Alderson-Broadbent College, 1951.
- SUE RIGGS, *Laboratory Technician in Bacteriology*

CLERICAL PERSONNEL

- MILDRED F. FISHER, *Secretary to the Dean*
- NAOMI ANN WADE, *Secretary and Record Clerk*
B.S., West Virginia University, 1951.
- MARTHA J. MAYNARD, *Secretary in Bacteriology*
- MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946.

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

- JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
- CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
- SAMUEL JOHN MORRIS, *Physician and Medical Adviser to the Department of Athletics*
M.D., University of Maryland, 1912.
- HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
- EDGAR FRANK HEISKELL, JR.,* *Assistant Physician*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University Medical School, 1943.
- DAVID ZACKQUILL MORGAN, *Physician*
A.B., B.S., West Virginia University, 1948; M.D., Medical College of Virginia, 1952.

NURSES

- HELEN LOUISE KUDLA, R.N., *Nurse in the University Health Service*
- NORMA COFFINDAFFER, R.N., *Nurse in the University Health Service*
- BETTY ANN DINEEN DAILEY, R.N., *Nurse in University Infirmary*
- MARGARET LEE HARBERT, R.N., *Nurse in University Infirmary*
- MARY LEE NEAL, R.N., *Nurse in University Infirmary*
- MARGARET ANN YARBROUGH, R.N., *Nurse in University Infirmary*
- KATHERINE LEWIS SIEHL, *Nurses' Aide in University Infirmary*

TECHNICIANS

- FABRY LIVINGSTON HAWK, *Chief Technician in the University Health Service*
Registered Medical Technologist
- PASQUALE GUGLIOTTA, *Assistant Technician*
in the University Health Service

*Part time. In private practice.

CLERICAL PERSONNEL

HELEN CLARISSA O'NEILL, *Secretary in the University Health Service*

A.A. Immaculata College, 1936

ETHEL FEATHER ELLIS, *Receptionist in the University Health Service*

MARGARET ANNE WALTER, *Clerk in the University Health Service*

THE STANDING COMMITTEES

Executive: E. J. VAN LIERE (*chairman*), F. R. WHITTLESEY, and C. B. PRIDE.

Admissions and Scholarship: S. B. CHANDLER (*chairman*), C. K. SLEETH, M. L. HOBBS, and R. F. KRAUSE.

Library: S. B. CHANDLER (*chairman*), J. C. STICKNEY, C. K. SLEETH, M. O. COOVER, and C. R. BALL.

Research, Fellowships, and Grants: D. W. NORTHUP (*chairman*), M. L. HOBBS, J. M. SLACK, E. J. VAN LIERE, R. F. KRAUSE, and D. T. WATTS.

Seminars: C. K. SLEETH (*chairman*), J. C. STICKNEY, E. J. VAN LIERE, and J. B. HYDE.

Clinical and Special Facilities: C. K. SLEETH (*chairman*), C. B. PRIDE, M. L. HOBBS, G. R. MAXWELL, F. R. WHITTLESEY, and J. J. LAWLESS.

Curriculum: C. K. SLEETH (*chairman*), E. J. VAN LIERE, T. W. WILLIAMS, D. T. WATTS, and R. G. SPEARS.

Student Loans and Scholarships: J. C. STICKNEY (*chairman*), E. J. VAN LIERE, T. W. WILLIAMS, J. B. HYDE, and D. T. HICKS.

Medical Technology: M. L. HOBBS (*chairman*), R. F. KRAUSE, E. J. VAN LIERE, and R. G. SPEARS.

Policy: Heads of departments and the director of the University Health Service.

Graduate Study: J. M. SLACK (*chairman*), J. C. STICKNEY, R. F. KRAUSE, and D. T. WATTS.

Social: J. C. STICKNEY (*chairman*), J. B. HYDE, C. R. BALL, M. O. COOVER, and W. E. COWELL.

Animal House: D. T. WATTS (*chairman*), P. C. STICKNEY, C. R. BALL, E. J. VAN LIERE, and R. F. KRAUSE.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination, including blood tests, urinalysis, and chest X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes five physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped with about 20 beds and operated as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

LIVING ACCOMMODATIONS

The University maintains three large dormitories, one for men and two for women. Cost of room and board in all dormitories ranges from \$459 to \$549 per academic year of 9 months. The University reserves the right to change these rates as necessity demands. For information as to accommodations and rates, address the office of the Business Director of Residences, West Virginia University, Morgantown.

Medical students, in the main, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the dormitories. For further information concerning houses on the approved list, men should address the Office of Off-Campus Housing, Room 207, Administration Building, West Virginia University, Morgantown. Women should communicate with the office of the Dean of Women, West Virginia University, Morgantown.

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. Registration fees for residents are \$258; for nonresidents, \$700 per academic year. There is an annual breakage deposit of \$10, part of which is usually returned at the end of the year. The total legitimate cost of a nine-month session for medical students in residence will range from \$1,000 to \$1,500 exclusive of traveling expenses. The School of Medicine furnishes microscopes for students without charge.

CAMPUS PARKING REGULATIONS, FEES AND CHARGES

Students are required to observe all rules and regulations of the University with respect to the parking of motor vehicles on the campus, the fees for parking permits, and the fines or charges imposed for the violation of such rules and regulations. A student who fails to pay any such fine or charge imposed on him during any semester or term will be denied the right to graduate or to reregister, as the case may be, as well as the right to obtain a transcript, until full payment is made.

CREDIT ACCEPTED FROM A JUNIOR COLLEGE

The maximum credit accepted from a junior college accredited by the North Central Association of Colleges and Secondary Schools or other regional accrediting association will not exceed seventy-two (72) semester hours, and credit will be allowed for lower division courses only. No credit will be allowed for courses completed in a junior college subsequent to attainment of junior or higher rank by the student at the University.

REGISTRATION

All medical students are expected to register at the Medical Building on the days set apart for registration at the beginning of each semester as announced in the calendar on page 3.

No student will be permitted to register in the School of Medicine after the first week of classes.

Persons who are not registered as students in the University and who are not members of the administrative or teaching staffs shall not be admitted to regular attendance in School of Medicine classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Scholarship Committee and the professor in charge of the course.

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

- A—excellent—given only to students of superior ability and attainment
- B—good—given to those students who are well above average but who are not in the highest group
- C—fair—average students
- D—poor but passing
- I—incomplete
- F—failure
- W—all withdrawals prior to end of second week following date for mid-semester reports
- WP—withdrew passing
- WF—withdrew failing
- FIW—failure because of irregular withdrawal
- X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF," "FIW"—0. When the grade of "I" becomes converted into a grade carrying credit, the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Scholarship. (University Rule.)

For Medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Scholarship Committee.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

ABBREVIATIONS

The following abbreviations are used in the announcements of courses:

- I—a course offered during the first semester.
- II—a course offered during the second semester.
- I, II—a semester course offered each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course offered during the summer term.
- hr.—number of semester hours credit per course.
- Conc.—concurrent.

For convenience each course is designated by the name of the department and the number of the course. The plan for numbering courses in West Virginia University is as follows:

- Courses 1 to 99—courses primarily for freshmen and sophomores.
- Courses 100 to 199—courses open to juniors and seniors.
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates.
- Courses 300 to 399—courses open to graduates only.

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The School of Medicine as now organized had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. Degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

PROPOSED EXPANSION OF MEDICAL SCHOOL

The West Virginia Legislature in 1951 made provision for the expansion of the Medical School to include the four years required for the M.D. Degree. Training in dentistry and nursing also are to be included. It is too early to announce dates for the beginning of this program, inasmuch as the necessary planning and construction work will require many months. Until further announcement, the two-year curriculum will be continued as in recent years.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, located at Hopemont, Preston County, 40 miles from Morgantown, is approved by the American Medical Association for residency. It has 300 beds and is a hospital primarily for pulmonary diseases. A substantial number of beds, however, are set aside for purely medical and surgical cases. By a special arrangement between the superintendent and staff of the hospital and West Virginia University, the School of Medicine has access to the hospital for teaching purposes and the superintendent and members of the staff become University officials. This arrangement provides an excellent affiliation for instruction in examination of the sick, with particular reference to pulmonary diseases.

By special arrangements, students of the School of Medicine also have access to clinical facilities of the following institutions for instruction in physical diagnosis, medicine, and surgery: Monongalia General Hospital, with a bed capacity of 100; and Vincent Pallotti Hospital, a private general hospital with a bed capacity of 90.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from Vincent Pallotti Hospital, Monongalia General Hospital, and Hopemont Sanitarium. This arrangement materially augments the pathological museum, which already numbers about 1,400 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence, besides assuring authoritative records for medico-legal purposes.

BUILDINGS AND EQUIPMENT

The three-story Medical Building furnishes room for most of the School of Medicine. On the first floor are the offices of the Dean, a general lecture room, a reading and study room, and the pharmacological laboratory. On the second floor are laboratories for bacteriology and physiology. On the third floor are laboratories for gross and microscopic anatomy, a large lecture room, and the X-ray room. All departments have appropriate offices, technical rooms, and storage space. Embalming and cadaver storage rooms are in the basement. Quarters for experimental animals are provided in separate buildings.

The biochemical laboratory occupies rooms in the Chemistry Building. The department office is Room 430; communicating with it are three rooms used as stock and preparation rooms and for research.

The Department of Pathology occupies rooms on the second floor of the University Health Center; a good-sized laboratory-lecture room and the necessary rooms for a museum, preparations, storage, offices, and private laboratories.

LIBRARY

The Medical Library is not organized as a separate unit but is housed in the University Library, where publications of prime importance to the students and faculty of the School of Medicine are to be found in close proximity to related biological and chemical publications. Purely chemical works, many of which are of interest in medicine, are housed in the Chemistry Building which is adjacent to the Library. Additional current issues of essential medical journals and periodicals of general scientific interest are conveniently available in the students' lounge in the School of Medicine.

There are about 18,000 catalogued volumes in the Library which constitute the medical collection. Roughly half of these are bound volumes of periodicals; the remainder are textbooks and monographs concerned with pre-clinical fields for the most part but comprising also better representative works in internal medicine, surgery, gynecology, obstetrics, public health, hygiene, and history of medicine. Certain other publications are available on bibliofilm, for which reading facilities are offered in the Library and in the Department of Bacteriology. The Library

has a subscription list of over 150 leading medical journals. Various departments of the School of Medicine receive a number of special journals, and the Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

The Library maintains an inter-library loan system whereby materials not contained in the Library may be borrowed from the Surgeon General's Library, Library of Congress, or other libraries. Complete sets of various abstracting journals, including the Quarterly Cumulative Index Medicus, may be found in the general reading room of the Library. Library service is available to physicians of the state through loans of publications or through the furnishing of photostatic copies of articles.

A committee from the faculty of the School of Medicine is active in the interests of the Medical Library.

LOANS

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, others available to students of all colleges in the University. For information about loans, inquiries should be made to Director Joseph C. Gluck, Committee on Prizes, Scholarships, and Loan Funds, West Virginia University, Morgantown.

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 p.m. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions of the School of Medicine, composed of members of the medical faculty. Admission is by recommendation of this committee and with the approval of the Dean of the School.

The number of students that can be accommodated is strictly limited. In recent years the number of applicants has been so great that only residents of West Virginia can be considered, and of these only a small percentage can be admitted. Those admitted are the applicants who, in the judgment of the Committee on Admissions, are best qualified for the study of medicine, and who give highest promise of full service in the practice of medicine. Recently the number of applicants has been so great that the School could not accommodate all who were reasonably well qualified.

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must have credit for at least 15 units of high-school work. This must include four units of English,¹ two of mathematics (algebra, one, and plane geometry, one), and other subjects as specified in the general admission requirements of the University. The School of Medicine strongly urges two units of Latin.

COLLEGE CREDITS REQUIRED

The applicant must have credit for at least three years in a college of recognized standing. This credit must total at least 90 semester hours exclusive of military and physical education.

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which it approves for premedical education. Medical schools must give preference to applicants from institutions on this list. Schools may accept students from other institutions only when they show evidence of superior ability, as indicated by adequate credits and superior grades. Students planning premedical work should consult the School of Medicine or other authentic source for information about approved colleges.

Credits submitted by applicants for work done elsewhere than in West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

A. **REQUIRED SUBJECTS:** The following subjects and hours are *minimum* requirements:

English Composition and Rhetoric 6 hr.

Biological Sciences 15 hr.

Must include General Zoology (preferable)—8 hours or General Biology—8 hours. Comparative Vertebrate Anatomy and, if possible, Vertebrate Embryology. Parasitology and Genetics are suggested electives. Human Anatomy, Physiology, Histology, or Bacteriology are not accepted as part of required hours and are not useful electives.

Chemistry 20 hr.

Must include inorganic chemistry, 8 hours; quantitative analysis, 3 hours; physical chemistry (preferred) or qualitative analysis, 3 hours; and organic chemistry (aliphatic and aromatic), 6 hours. Physiological chemistry is not acceptable.

Physics 8 hr.

Psychology 3 hr.

A Modern Foreign Language 12 hr.

German or French preferred. Must be in one language. Two units in high school are accepted as 6 hours of the requirement.

B. **ELECTIVES:** Other subjects to make the required 90 hours. In choosing electives, the premedical student should plan to secure a broad education, including adequate work outside the required sciences. Students should avoid courses which are in any sense a duplication or preview of courses given in Medical School. The following are suggested:

Mathematics—College algebra and trigonometry, while not absolute requirements, are looked upon with high favor by the Committee on Admissions. These subjects should be taken in the freshman premedical year because of their great usefulness in the study of physics and chemistry. Analytical geometry and calculus are of advantage to those students who can include them in their program.

Latin: Either high school or college Latin is strongly urged. It will be of great value.

Other Desirable Subjects: Art (drawing), botany, economics, geology, Greek, history, speech, political science, and sociology.

¹Students who present only 3 units of English may satisfy this requirement by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition.

OTHER ITEMS CONCERNING ELIGIBILITY FOR ADMISSION

Excellence of Premedical Scholarship

The quality of premedical scholarship is the best single criterion of probable success in the study of medicine. For this reason applicants with higher grades are given preference. Students with "average" premedical grades have only a small chance of doing satisfactory work in the School of Medicine even if admitted. An excess of credit hours or higher degrees do little to offset the disadvantage of low grades in securing admission to medical schools.

Medical College Admission Test

The score on this test is used as one criterion of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service of Princeton, New Jersey. Tests are announced for May 8 and November 1, 1954. It is of advantage to applicants to take the test in May, inasmuch as many acceptances will be issued before the November scores are available. Students should consult premedical advisers about making application more than a month in advance of the announced dates.

Residence

Preference is given to residents of West Virginia. For several years resident applicants have been so numerous that there have been no places available for nonresidents.

Personal Attributes

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Persons who have been out of college for some years, or who are several years older than the average applicant, are admitted only when they show unmistakable evidence of superior ability and training. Good health is a necessary qualification.

Previous Failures

Applicants who have been subject to suspension from this or other medical schools can be admitted only in exceptional cases, when the Committee on Admissions considers such readmission justified.

When to Apply for Admission

Application for admission in September 1955 should be made promptly upon completion of the school year 1953-54 (June 1954). Applications will be considered until the class is filled, but early application is very advantageous.

How to Apply for Admission

Application for admission must be made upon blanks which may be obtained from the Dean's office upon request. A small unmounted photograph must accompany the application. The completed application should be returned promptly to the School of Medicine.

Credentials

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the School of Medicine, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the School of Medicine.

Recommendations

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, two instructors in different science departments to send letters of recommendation to the School of Medicine. A letter from the family physician is useful.

Notification of Applicants

All applicants will be informed of the action of the Committee on Admissions as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

PREMEDICAL CURRICULUM AT WEST VIRGINIA UNIVERSITY

In keeping with the need for good premedical training, West Virginia University, through its premedical adviser, maintains careful supervision over those students who have declared their intention of preparing for the study of medicine. It is not the policy of West Virginia University to give special premedical courses but rather to maintain a well-balanced curriculum composed of courses regularly scheduled in various departmental offerings.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Scholarship Committee of the School of Medicine. This permission is not valid until it has been reported to the Registrar for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the Medical School during the semester should do so in regular manner. Consult the Dean's office for steps which must be taken.

FEES

All fees are due and payable at the office of the Comptroller on the day of registration. In addition to tuition and other fees, students registering in the School of Medicine pay the following:

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of registration in the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant. The deposit paid by students under the G.I. Bill of Rights will be refunded after the full tuition for the semester has been paid.

TUITION AND OTHER FEES

	Residents ¹	Non-Residents ⁴
Full-time students ³ (per semester) Tuition	\$ 87.00	\$308.00
University Fees	42.00	42.00
Total	\$129.00	\$350.00
Part-time students (per semester hour) ²	8.00	20.00

Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4 per credit hour in addition to the fee charged in the college or school in which they are registered.

Breakage deposit (for year) \$10.00

Breakage deposit for University students not regularly enrolled in medical school, for one laboratory course, \$5, and for more than one course, \$10.

PROMOTIONS AND SUSPENSIONS

The Committee on Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Scholarship Committee.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia, as noted on page 11.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

Proficiency in English. The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their college work after June 1, 1952. Students in Medicine and Medical Technology who have not satisfied this requirement must take this examination in their first semester of registration in the Medical School.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. Medical students may work toward this degree by study during four summer terms (two full summers.) For fuller information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements of the Graduate School*.

Only a small number of graduate students can be accommodated in departments of the School of Medicine. Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

SCHEDULE OF COURSES FOR 1954-55

COURSE	HR. PER WEEK			HR. PER SEMESTER			SEMESTER CREDIT HOURS
	Lect.	Lab.	Total	Lect.	Lab.	Total	

FIRST YEAR — FIRST SEMESTER

Gross Anatomy 201	2	8	10	32	128	160	6
Histology 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	9	13	64	144	208	7

FIRST YEAR — SECOND SEMESTER

Gross Anatomy 202	3	6	9	48	96	144	5
Neuroanatomy 203	3	6	9	48	96	144	5
Medical Bacteriology 221	3	9	12	48	144	192	6
Physiology 242	2	3	5	32	48	80	3

SECOND YEAR — FIRST SEMESTER

Hygiene 222	2	0	2	32	0	32	2
Physiology 243	5	6	11	80	96	176	7
Gen. and Tumor Pathology 251	5	9	14	80	144	224	7
Pharmacodynamics 262	3	0	3	48	0	48	3
Physical Diagnostic 271	1	0	1	16	0	16	*
Introductory Medicine 272	0	2	2	0	32	32	*
Psychobiology 273	1	0	1	16	0	16	1
Biostatistics 274	1	0	1	16	0	16	1

SECOND YEAR — SECOND SEMESTER, FIRST HALF

Applied Anatomy 204	2	4	6	16	32	48	2†
Special Pathology 252	1	2	3	8	16	24	§
Clinical Pathology 254	2	4	6	16	32	48	§
Medical Pharmacology 263	4	6	10	32	48	80	§
Physical Diagnosis 271	1	2	3	8	16	24	§
Introductory Medicine 272	2	0	2	16	0	16	§
History of Medicine 275	1	0	1	8	0	8	0
Surgery, Principles of 281	2	0	2	16	0	16	§
Obstetrics 291	2	0	2	16	0	16	§

SECOND YEAR — SECOND SEMESTER, SECOND HALF

Special Pathology 252	2	2	4	16	16	32	2
Clinical Pathology 254	3	7	10	24	56	80	3
Medical Pharmacology 263	3	3	6	24	24	48	4
Clinical Anesthesiology 264	1	0	1	8	0	8	0
Physical Diagnosis 271	2	2	4	16	16	32	3
Introductory Medicine 272	2	2	4	16	16	32	3
History of Medicine 275	1	0	1	4	0	4	0
Surgery, Principles of 281	2	2	4	16	16	32	2
Obstetrics 291	2	0	2	16	0	16	2

*Course continues throughout the year.

†Course completed at mid-semester.

§Course continues throughout the semester.

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Biochemistry						Histology			
T	Gross Anatomy						Histology			
W	Biochemistry						Gross Anatomy			
Th	Gross Anatomy			Biochem.			Histology			
F	Biochemistry						Histology			

FIRST YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Neuroanatomy			G. Anat.			Bacteriology			
T	Gross Anatomy						Physiology			
W	Neuroanatomy			Physiol.			Bacteriology			
Th	Gross Anatomy						Bacteriology			
F	Neuroanatomy			Physiol.			Bacteriology			

SECOND YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Pharm.	Physiol.	Medicine				Pathology			
T	Pathology			Physiol.			Physiology			
W	Pathology		Hygiene	Physiol.			Pathology			
Th	Pharm.	Physiol.	Biostat.	Phys. Diag			Physiology			
F	Pharm.	Psychobiol.	Hygiene	Physiol.			Pathology			

SECOND YEAR—SECOND SEMESTER, FIRST HALF

	8	9	10	11	12	1	2	3	4	5
M	Pharm.	Obstetrics	Cl. Path.	Phys. Diag.			Pharmacology			
T	Pharm.	Medicine	Hist. Med.	Surgery			Applied Anatomy			
W	Medicine	Pharm.	Clinical Pathology				Pharmacology			
Th	Pharm.	Cl. Path.	Obstet.	Surgery			Applied Anatomy			
F	Physical Diagnosis		Clinical Pathology				Pathology			

SECOND YEAR—SECOND SEMESTER, SECOND HALF

	8	9	10	11	12	1	2	3	4	5
M	Medicine or Surgery		Cl. Path.	Obstet.			Pathology	Hist. Med.	Anesth.	
T	Medicine or Surgery		Pharm.	Surgery			Clinical Pathology			
W	Medicine	Phys. Diag.	Pathology				Pharmacology			
Th	Medicine	Phys. Diag	Pharm.	Surgery			Clinical Pathology			
F	Physical Diagnosis		Pharm.	Obstet.			Clinical Pathology			

COURSES OF INSTRUCTION

NOTE—Courses marked “*” are required of first-year students; those marked “†” are required of second-year students.

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information see *Announcements of the Graduate School*.

ANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructors HYDE and BALL

- 201.* GROSS ANATOMY. I. 6 hr. Gross structure of the human body, including pertinent aspects of embryonic development. PR: General Zoology. Comparative Anatomy and Embryology desirable. Lecture, 2 hr. per week; lab., 8 hr.
- 202.* GROSS ANATOMY. II. 5 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 3 hr. per week; lab., 6 hr.
- 203.* NEUROANATOMY. II. 5 hr. PR: Anatomy 201. Structure of the gross and microscopic nervous system with notes on its embryonic development. Lecture 3 hr. per week; lab. 6 hr.
- 204.† APPLIED ANATOMY. II. 2 hr. PR: Anatomy 201, 202, 203, and Embryology 206. Lecture, 2 hr. per week; lab., 4 hr. during first half of semester.
- 205.* HISTOLOGY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. Histological structure and elementary embryology of tissues and organs. Lecture, 3 hr. per week; lab., 9 hr.

BACTERIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professor SPEARS; Instructor CANBY; Lecturer KENNEDY; Assistant KUCHLER

- 220. PATHOGENIC BACTERIOLOGY. I, S. 5 hr. PR or Conc.: Chemistry 131 (Organic Chemistry). For students in Medical Technology and Pharmacy. Detailed study of microorganisms with emphasis on those causing human diseases. Lecture, 2 hr. per week; lab., 8 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.* MEDICAL BACTERIOLOGY. II. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry). Biochemistry 231 desirable. Detailed study of pathogenic microorganisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr.
- 222.† PUBLIC HYGIENE. I. 2 hr. PR: Consent of instructor. Introduction into the principles of public health. Lecture 2 hr. per week.
- 224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.

323, 321. ADVANCED BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsia, and viruses. Graduate students only.

323, 324, 325, 326. RESEARCH IN BACTERIOLOGY. I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professor COOVER; Assistant POWELL

139. GENERAL BIOCHEMISTRY. II. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics and Medical Technology. Open to other qualified students.

230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.

231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab., 9 hr.

237, 238. SEMINAR IN BIOCHEMISTRY. I, II. 1 hr. per semester. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.

330, 331. BIOCHEMICAL PREPARATIONS. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.

333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

275.† HISTORY OF MEDICINE. II. No Credit. A brief history of the development of the science and art of medicine. Lecture, 1 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, STARKEY and TAIT; Instructor JOHNSON

271.† PHYSICAL DIAGNOSIS. Yr. 3 hr. Lecture, 1 hr. per week during first semester; lecture, 1 hr. per week, lab., 2 hr. during first half of second semester; lecture, 2 hr. per week, practical work with patients, 2 hr. during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.

272.† INTRODUCTORY MEDICINE. Yr. 3 hr. Medical clinic—demonstration of clinical cases, 2 hr. per week during first semester; lecture, 2 hr. per week during first half of second semester; lecture, 2 hr. demonstration of clinical cases, 2 hr. per week during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.

273.† PSYCHOBIOLOGY. I. 1 hr. Introduction to the study of human personality, normal and abnormal. Lecture, 1 hr. per week.

274.† BIOSTATISTICS. I. 1 hr. Planned to aid in the understanding of the statistical methods commonly used in medical and biological work, and in the evaluation of experimental data in these fields. Lecture, 1 hr. per week.

OBSTETRICS

Professor VAN LIERE

- 291.† OBSTETRICS. II. 2 hr. PR: Anatomy 201, 202 (Human Anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor COWELL; Instructor EHRGOT; Assistants GODBY and WHEELER.

151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† GENERAL AND TUMOR PATHOLOGY. I. 7 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† SPECIAL PATHOLOGY. II. 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture 2 hr. per week, lab., 2 hr. during second half of semester.
- 254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.
256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor WATTS; Assistant Professor MCKINNEY; Instructor HERRING; Lecturer TUCKER

160. FUNDAMENTALS OF PHARMACOLOGY. II. 1 hr. PR or Conc.: Physiology 141. For students in the College of Pharmacy. Lecture 1 hour per week.
161. PRACTICAL PHARMACOLOGY. I. 4 hr. PR: Pharmacology 160. For students in the College of Pharmacy. Lecture 3 hours per week; lab., 3 hours.
- 262.† PHARMACODYNAMICS. I. 3 hr. PR: Physiology 141 or 242. Lecture, 3 hr. per week. The mechanism of action of drugs on living things. The fundamental relationships between drugs and drug action.
- 263.† MEDICAL PHARMACOLOGY. II. 4 hr. PR: Pharmacology 262. Lecture, 4 hr. per week, lab., 6 hr. first half of semester; lecture, 3 hr. per week, lab., 3 hr. second half of semester. The action of drugs commonly used clinically for man and animals.
- 264.† CLINICAL ANESTHESIOLOGY. II. No credit. PR: registration in Pharmacology 263. 1 hr. per week second half of semester. Practical demonstrations of anesthesia.
266. BIOCHEMORPHOLOGY. II. 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.

- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. ANESTHESIOLOGY. I, II, S. 3 hr. PR: Physiology 243. Production of surgical anesthesia in man. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP and VAN LIERE; Associate Professor STICKNEY; Instructor LOGAN.

141. ELEMENTARY PHYSIOLOGY. II. 4 hr. PR: Biology 1, 2 or Zoology 1, 2, Chemistry 131 (Organic Chemistry) (or Conc.) For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr.
- 242.* PHYSIOLOGY. II. 3 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology of muscle and nervous system. Lecture, 2 hr. per week; lab 3 hr.
- 243.† PHYSIOLOGY. I. 7 hr. PR: Same as for Physiology 242. Physiology of circulation, respiration, digestion, metabolism, secretion, endocrines, special senses. Lecture, 5 hr. per week; lab., 6 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE

- 281.† PRINCIPLES OF SURGERY. II. 2 hr. Lecture, 2 hr. per week during the first half of semester; lecture, 2 hr. per week during second half of semester, demonstrations of clinical cases and operative technique, 2 hr.

II. Curriculum in Medical Technology

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, etc., and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association, which inspects, evaluates, and approves schools. This School is included in the list of those approved by the American Medical Association. In this field, properly qualified persons, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, occupies two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser. Four years in all are required for the degree.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*

R. F. KRAUSE (Professor of Biochemistry)

R. G. SPEARS (Assistant Professor of Bacteriology)

E. J. VAN LIERE (Dean of Medical School)

REQUIREMENTS FOR ADMISSION

HIGH SCHOOL CREDITS REQUIRED

For admission to the curriculum in Medical Technology the applicant must have credit for at least 15 units of high school work. This must meet the requirements for admission to West Virginia University in the College of Arts and Sciences, including subjects specified in the University *Catalog*. In addition, one unit of plane geometry is desirable.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 semester hours, exclusive of military science, as specified below:

English. 12 semester hours. (Must include 6 hours composition and rhetoric, and 6 additional hours in literature.)

Modern Foreign Language. 12 hours.

Biological Science. 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry. 15 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 3 hours; qualitative analysis or physical chemistry, 4 hours.)

Physics. 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Students should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry or comparative anatomy.

*Military training*² is required of all freshman and sophomore men in West Virginia University.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms obtainable from the School of Medicine. These must be presented at the Office of the Dean of the School. Application should be made in February of the second pre-technology year and they will be considered after April 1. At the time of making application the student, unless in residence at West Virginia University, should request the registrar of his college to send an official transcript of his work to the Medical School.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the Medical School.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in making selection of students. Applicants from other institutions should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

FEEES

Students in Medical Technology pay the following fees: For full time students, \$67 per semester for residents of West Virginia and \$142 for nonresidents; for the summer of the senior year, \$5 for residents and \$7 for nonresidents. There is a breakage deposit of \$10 per year. The graduation fee of \$10 is payable at the beginning of the final semester. Students not registered in the Medical School or the College of Pharmacy pay \$4 per credit hour for courses taught by members of the medical faculty in addition to the regular fee for the college in which registered.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

STANDARDS OF SCHOLARSHIP

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year with a grade-point average of 1.5 per registration hour.

²See page 29.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During this year, students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Pathogenic bacteriology (220)	5	Elementary physiology (141)	4
Organic chemistry (131)	4	General biochemistry (139)	4
Comparative anatomy (231)	5	Parasitology (255)	4
Electives	3	Clinical laboratory diagnostic methods (151)	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygiene Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

MEDICAL STUDENTS 1953-54

FIRST YEAR STUDENTS (ENTERED SEPTEMBER 1953)

Bailey, Ronald James	Clarksburg
Barber, Daniel Brown (A.B., University of Chicago, 1950)	Charleston
Barger, Carl Clinton	Bluefield
Boggs, Raymond Browning	Clarksburg
Booher, William Thurlow	Wellsburg
Brasuk, John Leo (A.B., West Virginia University, 1953)	Grant Town
Bullington, Walter Graham (A.B., West Virginia University, 1953)	St. Albans
Callison, Harper Thomas	Marlington
Chambers, George Sidney	Logan
Deem, John Richard (A.B., West Virginia University, 1953)	Clarksburg
Divita, Eugene Charles	Montgomery
Dorsey, Nellie Ray (B.S., West Virginia Wesleyan, 1953)	Holcomb
Fender, Bill Noel (B.S., Concord College, 1947)	Bramwell
Flanary, Jack Ronald	Yukon
Franklin, Norman	Wheeling
Green, Louis Eldred	Piedmont
Hark, William Henry	Charleston
Harrison, Thomas Harold (A.B., West Virginia University, 1953)	Huntington
Hendricks, Daniel Ewell	Shenandoah Junction
Jones, Carlena Lee	Huntington
Kiser, Joseph Corbin	Parkersburg
Klaunberg, John Theodore (A.B., West Virginia University, 1953)	Grafton
Lemley, John William (A.B., West Virginia University, 1953)	Morgantown
Mazzocco, Thomas Richard	Morgantown
Mesaros, Michael Paul	Follansbee
Miltnerberger, Frederick William (B.S., Washington College, 1953)	Ridgeley
Mitchell, Grover Cleveland (B.S., Virginia Polytechnic Inst., 1953)	Union
Pavilack, Sidney (A.B., West Virginia University, 1953)	Wheeling
Sheppe Jack Ogden (B.S., Marshall College, 1950)	Huntington
Stark, Thomas Hall (A.B., Duke University, 1950)	Huntington
Trinkle, Sarabeth	Weston
Wells, Charles Jack	Princeton

SECOND-YEAR STUDENTS (ENTERED SEPTEMBER 1952)

Auvil, Donald Keith (A.B., West Virginia University, 1952)	Parsons
Bailey, Shirley Joe (A.B., West Virginia University, 1952)	Cedar Grove
Bauer, William (A.B., West Virginia University, 1952)	Omar
Blake, Charles Richard (A.B., West Virginia University, 1952)	St. Marys
Browning, Richard James (A.B., West Virginia University, 1953)	Huntington
Canada, William Hammond	Huntington
Crimm, Carl Eugene (A.B., West Virginia University, 1953)	Clarksburg
Daniel, Charles Richard (A.B., West Virginia University, 1952)	Beckley
Deardorff, William Alva (A.B., West Virginia University, 1952)	Charleston
Dunlap, Frank Edward (A.B., West Virginia University, 1952)	St. Albans
Dye, Robert Arthur (A.B., West Virginia University, 1949)	Morgantown
Fike, Robert Hamstead (A.B., West Virginia University, 1952)	Morgantown
Groves, Donald Stewart (A.B., West Virginia University, 1949)	Summersville
Halki, John Joseph (B.S., Pharm., West Virginia University, 1950)	Morgantown
Harman, Chester Doan (A.B., Bridgewater College, 1952)	Owego
Harper, William Hale (A.B., West Virginia University, 1952)	Elkins
Horne, Andrew Ferree (B.S., Davidson College, 1951)	Welch
Humphries, David Scott (B.S., Wake Forest College, 1951)	Beckley
Ingram, Marion Ellis (B.S., Davis and Elkins College, 1952)	Elkins
Lawson, William Junior	Monongah
Mau, Boyd Hickman (A.B., West Virginia University, 1953)	Elkins
Miles, Robert Llye (A.B., Marshall College, 1952)	Wheeling
Musselman, Laurence Ketter (A.B., West Virginia University, 1952)	Charleston

Perkins, Robert Louis (A.B., West Virginia University, 1953)	Clarksburg
Ripley, Gary Lemasters (B.S., Marshall College, 1952)	Huntington
Sams, James Caldwell	Huntington
Short, Joan Kalaine	Kopperston
Smith, Larry Click (A.B., Bridgewater College, 1951)	Crum
Terezis, Nick L.	Charleston

STUDENTS IN MEDICAL TECHNOLOGY

JUNIOR YEAR

Eppling, Betty Sue	Gap Mills
Harman, Phyllis Culp	Grafton
Hicks, Betty Lou	Morgantown
Kinley, Lois	Clarksburg
Linkous, Peggy Jean	Holden
Murphy, Frances Rebecca	Morgantown
Robertson, Harriet Lee	Fairmont
Santiago, Katherine	Bluefield
Seckman, Clarence	Clarksburg
Summers, Glenda White	Morgantown
Taylor, Paul Harold	Hopemont
Thralls, Margaret Ann	Waynesburg, Pa.

SENIOR YEAR

Bess, Margaret Johnson	Piedmont
Campbell, Phyllis Jean	Fairmont
Furrie, Winifred Claire	Brownsville, Pa.
Hartsfield, Patricia Anne	Keyser
Hathaway, Patricia Ann	Grantsville
Kisner, Ruth Josephine	Terra Alta
Loizos, Frances	Martinsburg
Meeks, Suzanne Virginia	Morgantown
Morton, Carolyn Ellen	Sutton
Pugh, Joanne Hoff	Lillybrook
Samuels, Edna Jeanne Smithson	Huntington
Weber, Judith Tierney	Weston

DIVISION OF MILITARY SCIENCE AND TACTICS

Requirements

West Virginia University, a beneficiary of the Act of Congress of 1862, offers in time of peace, a four-year course of instruction in military and air science and tactics. Successful completion of the entire course leads to a commission as Second Lieutenant in the United States Army Reserve, United States Army or United States Air Force. Distinguished military graduates of West Virginia University may apply for and be offered commissions as Second Lieutenants in the Regular Army or Regular Air Force, under conditions prescribed by law.

The course comprises two years of basic (Military Science 1, 2, or Air Science 1,2; Military Science 3, 4, or Air Science 3, 4), two years of advanced training (Military Science 105, 106, 107, and 108; Air Science 105, 106, 107, and 108), and a Summer Camp of six weeks duration for Military Science students and four weeks for Air Science students during the summer following the junior year. The Summer Camp is conducted at government expense and eligible students are paid \$78 monthly in addition to traveling expenses at the rate of 5 cents per mile.

All male students not specifically exempt by provisions of the appropriate paragraph below are required by chapter eighteen, article eleven, of the official code of West Virginia, and by orders of the Board of Governors of the University, to complete satisfactorily the entire basic course as prerequisite to graduation from the University. This work may be taken as enrolled or nonenrolled members of the Reserve Officers Training Corps. To be enrolled in R.O.T.C., or A.F.R.O.T.C., a student must be physically fit for subsequent service as a commissioned officer of the Army or Air Force. Quota limitations for enrolled members of the Reserve Officers Training Corps for both basic and advanced military and air science are set by the Department of the Army and Department of the Air Force and cannot be exceeded without special authority.

Within deferment quotas established by Public Law 758, 80th Congress, qualified and selected enrolled students are deferred by the Professor of Military Science and Tactics and/or Professor of Air Science and Tactics from military service under the Selective Service Act of 1948 and Selective Service Extension Act of 1950, as amended by the Universal Military Training and Service Act, November, 1951, as amended, until completion of their academic as well as their military courses, and receipt of their Baccalaureate Degree. Such deferment is subject to cancellation should the student fail to remain in good standing.

Curriculum

Basic instruction is given for three hours per week throughout the two semesters of each school year. Two hours credit is allowed for each semester's work.

The third and fourth years of instruction in Military Science and Air Science, corresponding to the junior and senior years of the student, comprise the advanced course and are entirely elective on the part of the student and highly selective on part of the Professor of Military Science and Tactics and/or Professor of Air Science and Tactics. Application for advanced training should be made not later than the end of the preceding school year to insure consideration.

Enrollment in the advanced courses Army ROTC or Air Force ROTC is elective on the part of those students who may be selected by the President of the University and the Professor of Military Science and Tactics or the professor of Air Science and Tactics, under regulations prescribed by the Secretary of the Army or the Secretary of the Air Force. Each student who shall have enrolled in either advanced course shall complete that course and, if tendered, accept a commission in a reserve component of the Army or Air Force upon completion of the course as a prerequisite for his graduation from the University, unless he is excused from this requirement by the authority of the Secretary of the Army or the Secretary of the Air Force.

All Army advanced course military science students follow the same curriculum on the basis of five hours per week, except that students will attend, following the third year of instruction, the summer camp of the branch to which they will be assigned upon receiving commissions. Assignment to branch is made by the Department of the Army during the third year of instruction based upon the preference of the student, his personal qualifications, civilian occupational and military experience, academic curriculum pursued, and the needs of the Army. Three hours credit is allowed for each semester completed.

Advanced Air Science students follow a common course of instruction for all students on the basis of live hours per week. Three hours credit is allowed for each semester completed.

Students with twelve months or more of previous honorable active service are eligible to apply for enrollment in the advanced courses immediately upon entrance into the University for the fall semester of their junior year. Students with less than twelve months service, but more than six, will be eligible to apply for enrollment in the advanced course only upon completion of M.S. or A.S. 3 and M.S. or A.S. 4.

Allowances

Commutation of subsistence, in the amount of the current value of the field ration (\$90 per day during the Fiscal Year 1954), will be paid monthly to each student taking the advanced course. In addition, uniforms are furnished all military students by the government.

Military Deposit

Each student must deposit with the Comptroller, at time of registration, the sum of \$10 to cover any loss or damage to Government property while in his possession. This deposit will be refunded at the expiration of the School term upon return of the undamaged property.

Exemptions

The following students will not be required to enroll in the Division of Military and Air Science and Tactics but may elect to do so with the approval of the Professor of Military Science and Tactics and/or the Professor of Air Science and Tactics:

- (1) Those who are not citizens of the United States.
- (2) Those who, at time of entrance, are more than 23 years of age, and former students over that age who re-enter the University after an absence of three years.
- (3) Graduate students.
- (4) Students who are taking only the short course, the special interim courses, or extension courses.
- (5) Students who at time of matriculation have successfully completed not less than 58 hours of work, and all who have completed the two-year basic Army R.O.T.C. or Air Force R.O.T.C. course at an institution maintaining a senior unit. Those who have satisfactorily completed one, two, or three semesters in a senior unit will be allowed comparable credit.

- (6) Students who are unable to perform military duty for physical reasons.

Exemptions will be determined by the adviser from the student's records and from recommendations of the Director of Student Health Service.

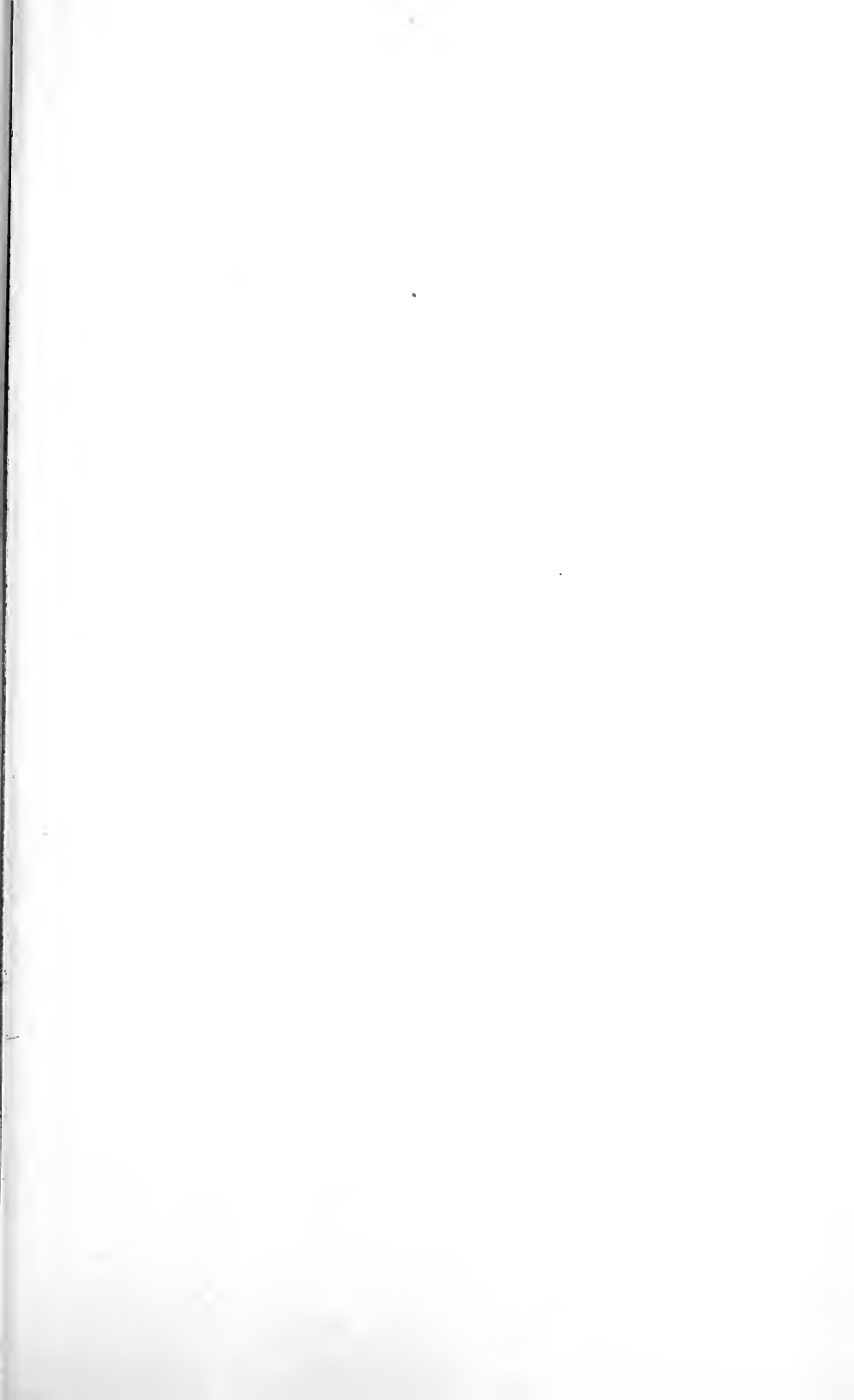
Students with one year or more previous honorable active service are exempted from taking basic military training (i.e., Military or Air Science 1, 2, 3, 4). Students with more than six months, but less than one year's service are exempted from taking the first year of basic military training (i.e., Military or Air Science 1, 2). Note Curriculum in connection with advanced course work.

Organization

The Division of Military and Air Science and Tactics and the conduct of military training is the responsibility of the Professor of Military Science and Tactics, and Professor of Air Science and Tactics who, together with their military staffs, are officers and noncommissioned officers of the Army and Air Force, appointed by the Department of the Army and Department of the Air Force for duty at West Virginia University.

R.O.T.C. Bands

There is an Army and an Air Force band. Membership is restricted to R.O.T.C. students. These bands are drawn from the several schools and colleges within the University. Assignment to one of the bands is determined by audition before the Director of the Band.





WEST VIRGINIA UNIVERSITY

**THE SCHOOL OF
MEDICINE**

**WEST VIRGINIA UNIVERSITY BULLETIN
ANNOUNCEMENTS 1955-56**

YEAR 1955

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
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YEAR 1956

JANUARY							FEBRUARY							MARCH						
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APRIL							MAY							JUNE						
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29	30																			

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold-face type.

UNIVERSITY CALENDAR

1955

May 28, Saturday	Alumni Day
May 29, Sunday	Baccalaureate Exercises
May 30, Monday	Commencement Day
June 6, Monday	Registration for first term, Summer Session
June 7, Tuesday	First classes, first term, Summer Session*
July 4, Monday	Independence Day, a holiday
July 15, Friday	Close of first term, Summer Session
July 18, Monday	Registration for second term, Summer Session
July 19, Tuesday	First classes, second term, Summer Session*
August 26, Friday	Close of Summer Session
September 12, Monday, to September 18, Sunday, inclusive ..	Freshman Week Program
September 16, Friday, and September 17, Saturday	General Registration for first semester
September 19, Monday	First classes, first semester
October 11, Tuesday	Meeting of University Senate
November 7, Monday	Mid-semester reports due
November 24, Thursday, to November 27, Sunday, inclusive	Thanksgiving recess
December 21, Wednesday, to January 3, Tuesday, inclusive	Christmas recess

1956

January 20, Friday, to January 26 Thursday, inclusive	Final examinations for first semester
February 1, Wednesday, and February 2, Thursday ..	Registration for second semester
February 3, Friday	First classes, second semester
February 7, Tuesday	West Virginia University Day
February 14, Tuesday	Meeting of University Senate
March 26, Monday	Mid-semester reports due
March 29, Thursday, to April 4, Wednesday, inclusive	Easter recess
May 8, Tuesday	Meeting of University Senate
May 25, Friday, to June 1, Friday, inclusive ..	Final Examinations for second semester
May 30, Wednesday	Decoration Day, a holiday
June 2, Saturday	Alumni Day
June 3, Sunday	Baccalaureate Exercises
June 4, Monday	Commencement Day

*Classes will be held on July 9 and August 13.

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WEST VIRGINIA UNIVERSITY

ESTABLISHED FEBRUARY 7, 1867

MORGANTOWN

The Board of Governors

	TERM EXPIRES
THOMAS E. MILLSOP, <i>President</i> , Weirton	1957
RAYMOND E. SALVATI, <i>Vice-President</i> , Huntington	1956
WILLIAM G. THOMPSON, <i>Secretary</i> , Montgomery	1955
MRS. PAUL HAMMANN, Martinsburg	1958
E. G. OTEY, Bluefield	1959
THOMAS L. HARRIS, Parkersburg	1960
A. C. SPURR, Fairmont	1961
K. DOUGLAS BOWERS, Beckley	1962
FRANK J. ZSOLDOS, Pineville	1963
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State College of West Virginia University.

West Virginia University Bulletin

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Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

- IRVIN STEWART, LL.B., A.B., A.M., Ph.D., LL.D., *President of the University*
EDNA ARNOLD, M.A., *Dean of Women*
CHARLES EDWARD BUTLER, M.A. IN L.S., *Librarian*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENER, B.A., *Comptroller*
JAY EVERETT LONG, M.A., *Registrar of the University*
EDWARD JERALD VAN LIERE, B.A., M.S., M.D., Ph.D., Litt.D., F.A.C.P., *Dean and Professor of Physiology*
ALDERSON FRANCIS FRY, A.B., B.L.S., A.M., LL.B., *Medical Librarian*

THE FACULTY

PROFESSORS

- EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; Ph.D., University of Chicago, 1927; Litt.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; Ph.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1917, Ph.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy and Chairman of Committee on Admissions and Scholarship*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; Ph.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., Ph.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE, *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., Rochester, 1942; M.D., Vermont, 1951.
DANIEL THOMAS WATTS, *Professor of Pharmacology*, A.B., Elon College, 1937; Ph.D., Duke University, 1942.

ASSOCIATE PROFESSORS

- Cecil BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

*Part time. In private practice.

THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*
B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.

JOHN CLIFFORD STICKNEY, *Associate Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; Ph.D., University of Minnesota, 1940.

ASSISTANT PROFESSORS

GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.

FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.

MULLEN O. COOVER, *Assistant Professor of Biochemistry*
A.B., Shepherd State College, 1942; M.S., West Virginia University, 1947.

ARCHIE LEMUAL STARKEY,* *Assistant Professor of Medicine (Physical Diagnosis) (Superintendent of Hopemont Sanitarium)*

B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.

H. SINCLAIR TAIT,* *Assistant Professor of Psychiatry (Superintendent of Weston State Hospital)*

M.D.C.M. Dalhousie University, 1914; F.A.P.A., 1952.

**RALPH GORDON SPEARS, *Assistant Professor of Bacteriology*

B.S., M.D., Northwestern University, 1947, 1951.

GORDON R. MCKINNEY, *Assistant Professor of Pharmacology*

A.B., DePauw University, 1946; M.S., Notre Dame University, 1948; Ph.D., Duke University, 1951.

DAVID ZACKQUILL MORGAN, *Assistant Professor of Pathology*

A.B., B.S., West Virginia University, 1948; M.D., Medical College of Virginia, 1952.

WILLIAM KNOX HARRELL, *Assistant Professor of Bacteriology*

B.S., University of Arkansas, 1947; M.S., University of Oklahoma, 1949; Ph.D., University of Michigan, 1954.

INSTRUCTORS

CARL EDWARD JOHNSON,* *Instructor in Medicine (Physical Diagnosis)*

A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.

DONALD ATWOOD HERRING, *Instructor in Pharmacology*

B.S. in Pharmacy, Ohio State University, 1941.

MAYNARD PRIDE,* *Instructor in Surgery*

A.B., Marietta College, 1935; M.D., Western Reserve, 1939.

WILLIAM AUGUST EHRGOTT,* *Instructor in Pathology*

B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.

JOHN B. HYDE, *Instructor in Anatomy*

B.S., University of South Dakota, 1944; Ph.D., University of Minnesota, 1953.

CHARLES MARION CANBY, *Instructor in Bacteriology*

A.B., Shepherd College, 1947; M.S., West Virginia University, 1949.

CARROLL RAYBOURNE BALL, *Instructor in Histology*

B.A., M.S., University of Mississippi, 1947, 1948.

ROWLAND ELIZABETH LOGAN, *Instructor in Physiology*

A.B., University of California, 1945; M.S., Northwestern University, 1951.

ASSISTANTS

PATRICIA O'CONNER SANDERS, *Research Assistant in Biochemistry*

B.S., West Virginia University, 1952.

HELEN MARY PAVLECH, *Assistant in Bacteriology*

B.S., M.A., West Virginia University, 1938, 1950.

RENATE GOHANNA FARLEY, *Laboratory Assistant in Biochemistry*

Med. Tech., Tuebinge, Germany, 1948.

DANE WOOD MOORE, JR., *Research Assistant in Bacteriology*

B.S., Alderson Broadbush College, 1950.

*Part time. In private practice.

**Leave of absence 1952-1953.

LECTURERS

- EIDEN BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.
MICHAEL ANTHONY VIGGIANO*, *Lecturer in Public Health*.
A.M., B.S., West Virginia University, 1932, 1934; M.D., Rush Medical School, 1937;
MPH, Johns Hopkins University, 1946.

TECHNICIANS

- FABRY LIVINGSTONE HAWK, *Laboratory and X-Ray Technician in Pathology*
Registered Medical Technologist.
ALFRED HOWARD, *Animal Caretaker and Technician for the Departments of Physiology and Pharmacology*
B.S., West Virginia University, 1949.
WILLIS G. LEMLEY, *Laboratory Technician in Anatomy*
A.B., West Virginia University, 1942.
JOHN EDWARD NUTTER, *Bacteriologist*
B.S., Alderson-Broaddus College, 1951.
SUE RIGGS, *Laboratory Technician in Bacteriology*
NILDA MONROIG HAYNER, *Technician in Bacteriology*
MT, School of Tropical Medicine, Puerto Rico, 1950.
PATRICIA ANN HATHAWAY, *Glassware Technician in Bacteriology*
B.S., West Virginia University, 1954.
MARGARET BESS CAMPBELL, *Technician in Pathology*
B.S., West Virginia University, 1954.

CLERICAL PERSONNEL

- MILDRED F. FISHER, *Secretary to the Dean*
PEGGY MARIE MURPHY, *Secretary and Record Clerk*
MARTHA J. MAYNARD, *Secretary in Bacteriology and Pharmacology*
MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946.

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

- JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., PH.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
SAMUEL JOHN MORRIS, *Physician and Medical Adviser to the Department of Athletics*
M.D., University of Maryland, 1912.
HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
EDGAR FRANK HEISKELL, JR.,* *Assistant Physician*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University Medical School, 1943.

NURSES

- HELEN LOUISE KUDLA, R.N., *Nurse in the University Health Service*
NORMA COFFINDAFFER, R.N., *Nurse in the University Health Service*
BETTY ANN DINEEN DAILEY, R.N., *Nurse in University Infirmary*
MARY LEE NEAL, R.N., *Nurse in University Infirmary*
MARGARET ANN YARBROUGH, R.N., *Nurse in University Infirmary*
DOROTHY HEGGE WEIK, R.N., *Nurse in University Infirmary*

*Part time. In private practice.

TECHNICIANS

FABRY LIVINGSTON HAWK, *Chief Technician in the University Health Service*
Registered Medical Technologist
PASQUALE GUGLIOTTA, *Assistant Technician*
in the University Health Service

CLERICAL PERSONNEL

HELEN CLARISSA O'NEILL, *Secretary in the University Health Service*
A.A. Immaculata College, 1936
ETHEL FEATHER ELLIS, *Receptionist in the University Health Service*
MARGARET ANNE WALTER, *Clerk in the University Health Service*

THE STANDING COMMITTEES

Admissions and Scholarship: S. B. CHANDLER (*chairman*), C. K. SLEETH, M. L. HOBBS, R. F. KRAUSE, and D. T. WATTS.
Library: S. B. CHANDLER (*chairman*), J. C. STICKNEY, C. K. SLEETH, M. O. COOVER, C. R. BALL, and G. R. MCKINNEY.
Research, Fellowships, and Grants: D. W. NORTHUP (*chairman*), M. L. HOBBS, J. M. SLACK, E. J. VAN LIERE, R. F. KRAUSE, and D. T. WATTS.
Seminars: J. J. LAWLESS, (*chairman*), J. C. STICKNEY, E. J. VAN LIERE, J. B. HYDE, and G. R. MCKINNEY.
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Curriculum: C. K. SLEETH (*chairman*), E. J. VAN LIERE, T. W. WILLIAMS, D. T. WATTS, and R. F. KRAUSE.
Student Loans and Scholarships: J. C. STICKNEY (*chairman*), E. J. VAN LIERE, T. W. WILLIAMS, J. B. HYDE, and D. T. WATTS.
Medical Technology: M. L. HOBBS (*chairman*), R. F. KRAUSE, E. J. VAN LIERE, and J. M. SLACK.
Policy: Heads of departments and the director of the University Health Service.
Graduate Study: J. M. SLACK (*chairman*), J. C. STICKNEY, R. F. KRAUSE, and D. T. WATTS.
Social: J. C. STICKNEY (*chairman*), J. B. HYDE, C. R. BALL, M. O. COOVER, and D. Z. MORGAN.
Animal House: D. T. WATTS (*chairman*), P. C. STICKNEY, C. R. BALL, E. J. VAN LIERE, and R. F. KRAUSE.
Building Committee: J. M. SLACK (*chairman*), M. L. HOBBS, R. F. KRAUSE, J. J. LAWLESS, C. K. SLEETH, E. J. VAN LIERE, and T. W. WILLIAMS.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination, including blood tests, urinalysis, and X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes four physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped with about 20 beds and operated as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

LIVING ACCOMMODATIONS

The University maintains three large dormitories, one for men and two for women. Cost of room and board in all dormitories ranges from \$459 to \$549 per academic year of 9 months. The University reserves the right to change these rates as necessity demands. For information as to accommodations and rates, address the office of the Business Director of Residences, West Virginia University, Morgantown.

Medical students, in the main, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the dormitories. For further information concerning houses on the approved list, men should address the Office of Off-Campus Housing, Room 207, Administration Building, West Virginia University, Morgantown. Women should communicate with the office of the Dean of Women, West Virginia University, Morgantown.

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. Registration fees for residents are \$264; for nonresidents, \$700 per academic year. There is an annual breakage deposit of \$10, part of which is usually returned at the end of the year. The total legitimate cost of a nine-month session for medical students in residence will range from \$1,000 to \$1,500 exclusive of traveling expenses. The School of Medicine furnishes microscopes for students without charge.

CAMPUS PARKING REGULATIONS, FEES AND CHARGES

Students are required to observe all rules and regulations of the University with respect to the parking of motor vehicles on the campus, the fees for parking permits, and the fines or charges imposed for the violation of such rules and regulations. A student who fails to pay any such fine or charge imposed on him during any semester or term will be denied the right to graduate or to reregister, as the case may be, as well as the right to obtain a transcript, until full payment is made.

CREDIT ACCEPTED FROM A JUNIOR COLLEGE

The maximum credit accepted from a junior college accredited by the North Central Association of Colleges and Secondary Schools or other regional accrediting association will not exceed seventy-two (72) semester hours, and credit will be allowed for lower division courses only. No credit will be allowed for courses completed in a junior college subsequent to attainment of junior or higher rank by the student at the University.

DIVISION OF MILITARY SCIENCE AND TACTICS AND AIR SCIENCE

Requirements

West Virginia University, a beneficiary of the act of Congress of 1862, offers in time of peace, a four-year course of instruction in military and air science and tactics. Successful completion of the entire course leads to a commission as Second Lieutenant in the United States Army Reserve, or United States Air Force Reserve. Distinguished military graduates of West Virginia University may apply for and be offered com-

missions as Second Lieutenants in the Regular Army or Regular Air Force, under conditions prescribed by law.

The course comprises two years of basic (Military Science 1, 2, or Air Science 1, 2; Military Science 3, 4, or Air Science 3, 4), two years of advanced training (Military Science 105, 106, 107 and 108, or Air Science 105, 106, 107 and 108), and Summer Camp of six weeks duration for Military Science students and four weeks Summer Training for Air Science students during the summer following the junior year. The Army Summer Camp and Air Force Summer Training is conducted at government expense, and eligible students are paid \$78 monthly in addition to traveling expenses at the rate of 5 cents per mile.

All male students not specifically exempt by provisions of the appropriate paragraph below are required by chapter eighteen, article eleven, of the official code of West Virginia, and by orders of the Board of Governors of the University, to complete satisfactorily the entire basic course as prerequisite to graduation from the University.

Within deferment quotas established by Public Law 758, 80th Congress, qualified and selected enrolled students are offered the opportunity of being deferred by the Professor of Military Science and Tactics or Professor of Air Science from military service under the Selective Service Act of 1948 and Selective Service Extension Act of 1950, as amended by the Universal Military Training and Service Act, November, 1951, as amended, until completion of their military courses, and receipt of their Baccalaureate Degree. Such deferment is subject to cancellation should the student not be selected for the advanced course, fail to remain in good standing, or to develop the qualities expected of an officer.

Curriculum

Basic instruction is given for three hours per week throughout the two semesters of each school year. Two hours' credit is allowed for each semester's work.

The third and fourth years of instruction in Military Science and Air Science, corresponding to the junior and senior years of the student, comprise the advanced course and are entirely elective on part of the student and selective on part of the Professor of Military Science and Tactics and Professor of Air Science. Application for advanced training should be made at the beginning of the second semester of the student's sophomore year.

Enrollment in the advanced courses Army ROTC or Air Force ROTC is elective on the part of those students who may be selected by the President of the University and the Professor of Military Science and Tactics or the Professor of Air Science, under regulations prescribed by the Secretary of the Army or the Secretary of the Air Force. Each student who shall have enrolled in either advanced course shall complete that course and, if tendered, accept a commission in a reserve component of the Army or Air Force upon completion of the course as a prerequisite for his graduation from the University, unless he is excused from this requirement by the authority of the Secretary of the Army or the Secretary of the Air Force.

All Army advanced course military science students follow the same curriculum on the basis of five hours per week. Assignment to branch of Army ROTC students is made by the Department of the Army during the fourth year of instruction based upon the preferences of the student, his personal qualifications, civilian occupational and military experience, academic curriculum pursued, and the needs of the Army. Three hours' credit is allowed for each semester completed.

Advanced Air Science students follow a common course of instruction for all students on the basis of five hours per week. Three hours' credit is allowed for each semester completed.

Students with twelve months or more of previous honorable active service are eligible to apply for enrollment in the advanced course immediately upon entrance into the University for the fall semester of their junior year. Students with less than twelve months service, but more than six, will be eligible to apply for enrollment in the advanced course only upon completion of Military Science 3 and 4, or Air Science 3 and 4.

Allowances

Commutation of subsistence, in the amount of the current value of the field ration (\$0.90 per day during the Fiscal Year 1955), will be paid monthly to each student taking the advanced course. In addition, uniforms, equipment, and textbooks are furnished all military and air science students by the government.

Military Deposit

Each student is financially responsible for all government property he is issued. A deposit of \$10 will be given to the Comptroller, at time of registration to cover any loss or damage to Government property while in his possession. This deposit, less a nominal administrative charge, will be refunded upon return of the undamaged property.

Exemptions

The following students will not be required to enroll in the Division of Military and Air Science and Tactics but may elect to do so with the approval of the Professor of Military Science and Tactics or the Professor of Air Science:

- (1) Those who are not citizens of the United States.
- (2) Those who, at time of entrance, are more than 23 years of age, and former students over that age who re-enter the University after an absence of three years.
- (3) Graduate students.
- (4) Students who are taking only the short course, the special interim courses, or extension work.
- (5) Students who at time of matriculation have successfully completed not less than 58 hours of work, and all who have completed the two-year basic Army ROTC or Air Force ROTC course at an institution maintaining a senior division unit. Those who have satisfactorily completed one, two, or three semesters in a senior division unit will be allowed comparable credit.
- (6) Students who are unable to perform military duty for physical reasons.

Exemptions will be determined by the adviser from the student's records and from recommendations of the Director of the Student Health Service.

Students with one year or more previous honorable active service are exempted from taking basic military training (i.e., Military or Air Science 1, 2, 3, 4). Students with more than six months but less than one year's service are exempted from taking the first year of basic military training (i.e., Military or Air Science 1, 2). Note curriculum in connection with advanced course work.

Organization

The Division of Military and Air Science and Tactics and the conduct of military science and air science instruction is the responsibility of the Professor of Military Science and Tactics, and Professor of Air Science who, together with their military staffs, are officers and non-commissioned officers of the Army and Air Force, appointed by the Department of the Army and Department of the Air Force for duty at West Virginia University.

Reserve Officers Training Corps Bands

There is an Army ROTC band and an Air Force ROTC Band. Membership is restricted respectively to basic Army and Air Force ROTC students. Assignment to one of the bands is determined by audition before the Director of the Band.

REGISTRATION

All medical students are expected to register at the Medical Building on the days set apart for registration at the beginning of each semester as announced in the calendar on page 1.

No student will be permitted to register in the School of Medicine after the first week of classes.

Persons who are not registered as students in the University and who are not members of the administrative or teaching staffs shall not be admitted to regular attendance in School of Medicine classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Scholarship Committee and the professor in charge of the course.

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

- A—excellent—given only to students of superior ability and attainment
- B—good—given to those students who are well above average but who are not in the highest group
- C—fair—average students
- D—poor but passing
- I—incomplete
- F—failure
- W—all withdrawals prior to end of second week following date for mid-semester reports
- WP—withdrew passing
- WF—withdrew failing
- FIW—failure because of irregular withdrawal
- X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF," "FIW"—0. When the grade of "I" becomes converted into a grade carrying credit, the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Scholarship. (University Rule.)

For Medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Scholarship Committee.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

ABBREVIATIONS

The following abbreviations are used in the announcements of courses:

- I—a course offered during the first semester.
- II—a course offered during the second semester.
- I, II—a semester course offered each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course offered during the summer term.
- hr.—number of semester hours credit per course.
- Conc.—concurrent.

For convenience each course is designated by the name of the department and the number of the course. The plan for numbering courses in West Virginia University is as follows:

- Courses 1 to 99—courses primarily for freshmen and sophomores.
- Courses 100 to 199—courses open to juniors and seniors.
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates.
- Courses 300 to 399—courses open to graduates only.

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The School of Medicine as now organized had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. Degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

PROPOSED EXPANSION OF THE MEDICAL SCHOOL

Recently the West Virginia Legislature made provision for the establishment of a four-year School of Medicine as well as Schools of Dentistry and Nursing. This means that an increased number of students will be accepted and that the M.D. degree will be granted.

A contract has now been let for the construction of the Basic Sciences Building which will house the pre-clinical departments of the School of Medicine as well as the Schools of Dentistry, Nursing, and Pharmacy. This building will be ready in the

Fall of 1957, thus it is likely that an increased class of medical students will be accepted in 1957 or 1958.

Preliminary plans for a teaching hospital are now being prepared and when the unit is completed it will be possible for West Virginia to confer the M.D. degree.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, at Hopemont, West Virginia, is approved by the American Medical Association for residency. It has approximately 400 beds primarily for pulmonary diseases, but a number of beds are set aside for other medical and surgical cases. The School of Medicine has access to this hospital for teaching purposes and the Superintendent and certain members of the staff become University officials. This arrangement provides an affiliation for instruction in clinical examination of patients.

Monongalia General Hospital and Vincent Pallotti Hospital, two local general hospitals with bed capacities of approximately 130 and 100 respectively, made their facilities available to the School of Medicine for teaching purposes by special arrangement between their administrative officers and the school.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from the Vincent Pallotti Hospital, Monongalia General Hospital, Hopemont Sanitarium, and the private practice of physicians of the area. This arrangement materially augments the pathological museum, which already numbers about 1,750 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence.

BUILDINGS AND EQUIPMENT

The three-story Medical Building furnishes room for most of the School of Medicine. On the first floor are the offices of the Dean, a general lecture room, a reading and study room, and the pharmacological laboratory. On the second floor are laboratories for bacteriology and physiology. On the third floor are laboratories for gross and microscopic anatomy, a large lecture room, and the X-ray room. All departments have appropriate offices, technical rooms, and storage space. Embalming and cadaver storage rooms are in the basement. Quarters for experimental animals are provided in separate buildings.

The biochemical laboratory occupies rooms in the Chemistry Building. The department office is Room 430; communicating with it are three rooms used as stock and preparation rooms and for research.

The Department of Pathology occupies rooms on the second floor of the University Health Center; a good-sized laboratory-lecture room and the necessary rooms for a museum, preparations, storage, offices, and private laboratories.

LIBRARY

The Medical Library is not organized as a separate unit but is housed in the University Library, where publications of prime importance to the students and faculty of the School of Medicine are to be found in close proximity to related biological and chemical publications. Purely chemical works, many of which are of interest in medicine, are housed in the Chemistry Building which is adjacent to the Library. Additional current issues of essential medical journals and periodicals of general scientific interest are conveniently available in the students' lounge in the School of Medicine.

There are about 18,000 catalogued volumes in the Library which constitute the medical collection. Roughly half of these are bound volumes of periodicals; the remainder are textbooks and monographs concerned with pre-clinical fields for the most part but comprising also better representative works in internal medicine, surgery, gynecology, obstetrics, public health, hygiene, and history of medicine.

Certain other publications are available on bibliofilm, for which reading facilities are offered in the Library and in the Department of Bacteriology. The Library has a subscription list of over 150 leading medical journals. Various departments of the School of Medicine receive a number of special journals, and the Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

The Library maintains an inter-library loan system whereby materials not contained in the Library may be borrowed from the Surgeon General's Library, Library of Congress, or other libraries. Complete sets of various abstracting journals, including the Quarterly Cumulative Index Medicus, may be found in the general reading room of the Library. Library service is available to physicians of the state through loans of publications or through the furnishing of photostatic copies of articles.

The interests of the Medical Library are furthered by a full-time librarian who works in conjunction with a committee of the faculty of the School of Medicine.

LOANS AND PART-TIME EMPLOYMENT

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, others available to students of all colleges in the University. For information about loans, inquiries should be made to Director Joseph C. Gluck, Committee on Prizes, Scholarships, and Loan Funds, West Virginia University, Morgantown.

A few part-time jobs are available on the general campus and in the School of Medicine. Concerning these, inquiries may be made to the Placement Bureau of the University or to the School of Medicine.

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 P.M. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions of the School of Medicine, composed of members of the medical faculty. Admission is by recommendation of this committee and with the approval of the Dean of the School.

The number of students that can be accommodated is strictly limited. In recent years the number of applicants has been so great that only residents of West Virginia can be considered, and of these only about thirty per cent could be admitted. Those admitted are the applicants who, in the judgment of the Committee on Admissions, are best qualified for the study of medicine, and who give highest promise of full service in the practice of medicine. Recently the number of applicants has been so great that the School could not accommodate all who were reasonably well qualified.

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must be a graduate of an accredited high school.

COLLEGE CREDITS REQUIRED

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which it approves for premedical education. Medical schools must give preference to applicants from institutions on this list. Schools may accept students from other institutions only when they show evidence of superior ability, as indicated by adequate credits and superior grades. Students planning premedical work should consult the School of Medicine or other authentic source for information about approved colleges.

Credits submitted by applicants for work done elsewhere than in West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The requirements outlined below may be met in either of two ways: (1) by pursuing a course of study leading toward a bachelor's degree with major and minor fields of the applicant's own choosing or, (2) by following a pre-medical curriculum such as that offered at West Virginia University.

The applicant must present credit from a college of recognized standing for at least 90 semester hours of work exclusive of military science and physical education. These credits must include the following minimum requirements.

<i>English Composition and Rhetoric</i>	6 hr.
<i>Biological Sciences</i>	14 hr.
Must include General Zoology (preferable)—8 hours or General Biology—8 hours. Comparative Vertebrate Anatomy and, if possible, Vertebrate Embryology.	
<i>Chemistry</i>	16 hr.
Must include inorganic chemistry, quantitative analysis, and organic chemistry (aliphatic and aromatic.)	
<i>Physics</i>	8 hr.
<i>Psychology</i>	3 hr.
<i>A Modern Foreign Language</i>	12 hr.
German or French preferred. Must be in one language. Two units in high school are accepted as 6 hours of the requirement.	

In addition to the above *required* material the following subjects are suggested as very desirable.

Mathematics—College algebra and trigonometry, while not absolute requirements, are looked upon with high favor by the Committee on Admissions. These subjects should be taken in the freshman pre-medical year because of their great usefulness in the study of physics and chemistry. Analytical geometry and calculus are of advantage to those students who can include them in their program.

Latin: Either high school or college Latin is strongly urged. It will be of great value.

Other Desirable Subjects: Art (drawing), botany, economics, geology, Greek, history, speech, political science, and sociology.

In summary, the applicant should present a broad general education including, whenever possible, a major in some field, not necessarily a natural science.

OTHER ITEMS CONCERNING ELIGIBILITY FOR ADMISSION

Excellence of Premedical Scholarship

The quality of premedical scholarship is the best single criterion of probable success in the study of medicine. For this reason applicants with higher grades are given preference. Students with "average" premedical grades have only a small chance of doing satisfactory work in the School of Medicine even if admitted. An excess of credit hours or higher degrees do little to offset the disadvantage of low grades in securing admission to medical schools. The practice of repeating courses to raise the grade is discouraged.

Medical College Admission Test

The score on this test is used as one criterion of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Tests are announced for May and November of each year. It is of advantage to applicants to take the test in May, inasmuch as many acceptances will be issued before the November scores are available. Students should consult premedical advisers about making application more than a month in advance of the announced dates.

Residence

Preference is given to residents of West Virginia. For several years resident applicants have been so numerous that there have been no places available for nonresidents.

Personal Attributes

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Persons who have been out of college for some years, or who are several years older than the average applicant, are admitted only when they show unmistakable evidence of superior ability and training. Good health is a necessary qualification.

Previous Failures

Applicants who have been subject to suspension from this or other medical schools can be admitted only in exceptional cases, when the Committee on Admissions considers such readmission justified.

When to Apply for Admission

Application for admission in September 1956 should be made promptly upon completion of the school year 1954-55 (June 1955). Applications will be considered until the class is filled, but early application is very advantageous.

How to Apply for Admission

Application for admission must be made upon blanks which may be obtained from the Dean of the School of Medicine, West Virginia University, Morgantown, West Virginia. A small, unmounted photograph must accompany the application. The completed application should be returned promptly to the School of Medicine.

Credentials

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the School of Medicine, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the School of Medicine.

Recommendations

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, two instructors in different science departments to send letters of recommendation to the School of Medicine. A letter from the family physician, clergyman, or some other individual who has known the applicant over a period of years is useful.

Notification of Applicants

All applicants will be informed of the action of the Committee on Admissions as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

PREMEDICAL CURRICULUM AT WEST VIRGINIA UNIVERSITY

In keeping with the need for good premedical training, West Virginia University, through its premedical adviser, maintains careful supervision over those students who have declared their intention of preparing for the study of medicine. It is not the policy of West Virginia University to give special premedical courses but rather to maintain a well-balanced curriculum composed of courses regularly scheduled in various departmental offerings. Premedical students are encouraged to major in a subject of their choice. Students who expect to apply for admission to the School of Medicine of West Virginia University, may satisfy the requirements by taking either the regular premedical curriculum, or by majoring in a field of their own choice, which need not be in a science, so long as the required subjects are included in the program.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Scholarship Committee of the School of Medicine. This permission is not valid until it has been reported to the Registrar for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the Medical School during the semester should do so in regular manner. Consult the Dean's office for steps which must be taken.

FEES

All fees are due and payable at the office of the Comptroller on the day of registration.

TUITION AND OTHER FEES

	Residents	Non-Residents
Full-time students (per semester) Tuition	\$87.00	\$305.00
University Fees	45.00	45.00
Total	\$132.00	\$350.00
Part-time students (per semester hour)	8.00	26.00
Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4 per credit hour in addition to the fee charged in the college or school in which they are registered.		
Breakage deposit (for year)		\$10.00
Breakage deposit for University students not regularly enrolled in medical school, for one laboratory course, \$5, and for more than one course, \$10.		

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of registration in the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant. The deposit paid by students under the G.I. Bill of Rights will be refunded after the full tuition for the semester has been paid.

PROMOTIONS AND SUSPENSIONS

The Committee on Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Scholarship Committee.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia as noted on page 11.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

Proficiency in English. The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their college work after June 1, 1952. Students in Medicine and Medical Technology who have not satisfied this requirement must take this examination in their first semester of registration in the Medical School.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. Medical students may work toward this degree by study during four summer terms (two full summers.) For fuller information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements of the Graduate School*.

Only a small number of graduate students can be accommodated in departments of the School of Medicine. Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

CURRICULUM REVISION

The curriculum of the Medical School is constantly under study by a special committee and by all members of the faculty. In the interests of offering the best possible course of instruction, curriculum revisions are made from time to time. A considerable

alteration in sequence of courses and in allocation of time to various departments is currently in progress. Students entering in the fall of 1955 will pursue in their freshman year the course of study outlined in this *Catalog*. The studies of their second year, however, will differ to some extent from the second year curriculum outlined here.

SCHEDULE OF COURSES FOR 1955-56

COURSE	HR. PER WEEK			HR. PER SEMESTER			SEMESTER CREDIT HOURS
	Lect.	Lab.	Total	Lect.	Lab.	Total	
FIRST YEAR — FIRST SEMESTER							
Gross Anatomy 201	2	7	9	32	112	148	6
Microscopic Anatomy 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	8	12	64	128	192	7
Medicine 277	1	0	1	16	0	16	1
FIRST YEAR — SECOND SEMESTER							
Gross Anatomy 202	3	7	10	48	112	160	5
Neuroanatomy 203	3	6	9	48	96	144	5
Physiology 241	7	8	15	112	128	240	9
Medicine 278	1	0	1	16	0	16	1
SECOND YEAR — FIRST SEMESTER							
Hygiene 222	2	0	2	32	0	32	2
Physiology 243	5	6	11	80	96	176	7
Gen. and Tumor Pathology 251	5	9	14	80	144	224	7
Pharmacodynamics 262	3	0	3	48	0	48	3
Physical Diagnosis 271	1	0	1	16	0	16	*
Introductory Medicine 272	0	2	2	0	32	32	*
Psychobiology 273	1	0	1	16	0	16	1
Biostatistics 274	1	0	1	16	0	16	1
SECOND YEAR — SECOND SEMESTER, FIRST HALF							
Applied Anatomy 204	2	4	6	16	32	48	2†
Special Pathology 252	1	2	3	8	16	24	§
Clinical Pathology 254	2	4	6	16	32	48	§
Medical Pharmacology 263	4	6	10	32	48	80	§
Physical Diagnosis 271	1	2	3	8	16	24	§
Introductory Medicine 272	2	0	2	16	0	16	§
History of Medicine 275	1	0	1	8	0	8	0
Surgery, Principles of 281	2	0	2	16	0	16	§
Obstetrics 291	2	0	2	16	0	16	§
SECOND YEAR — SECOND SEMESTER, SECOND HALF							
Special Pathology 252	2	2	4	16	16	32	2
Clinical Pathology 254	3	7	10	24	56	80	3
Medical Pharmacology 263	3	3	6	24	24	48	4
Physical Diagnosis 271	2	2	4	16	16	32	3
Introductory Medicine 272	2	2	4	16	16	32	3
History of Medicine 275	1	0	1	4	0	4	0
Surgery, Principles of 281	2	2	4	16	16	32	2
Obstetrics 291	2	0	2	16	0	16	2

*Course continues throughout the year.

†Course completed at mid-semester.

§Course continues throughout the semester.

COURSES OF INSTRUCTION

NOTE—Courses marked “*” are required of first-year students; those marked “†” are required of second-year students.

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information see *Announcements of the Graduate School*.

ANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructors HYDE and BALL

- 201.* GROSS ANATOMY. I. 6 hr. Gross structure of the human body, including pertinent aspects of embryonic development. PR: General Zoology. Comparative Anatomy and Embryology desirable. Lecture, 2 hr. per week; lab., 7 hr.
- 202.* GROSS ANATOMY. II. 5 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 3 hr. per week; lab., 7 hr.
- 203.* NEUROANATOMY. II. 5 hr. PR: Anatomy 201. Structure of the gross and microscopic nervous system with notes on its embryonic development. Lecture 3 hr. per week; lab. 6 hr.
- 204.† APPLIED ANATOMY. II. 2 hr. PR: Anatomy 201, 202, 203. Lecture, 2 hr. per week; lab., 4 hr. during first half of semester.
- 205.* MICROSCOPIC ANATOMY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. Histological structure and elementary embryology of tissues and organs. Lecture, 3 hr. per week; lab., 9 hr.

BACTERIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professors SPEARS and HARRELL; Instructor CANBY; Lecturer VIGGIANO; Assistant PAVELECH

- 220. PATHOGENIC BACTERIOLOGY. II. S. 5 hr. PR or Conc.: Chemistry 131 (Organic Chemistry). For students in Medical Technology and Pharmacy. Detailed study of microorganisms with emphasis on those causing human diseases. Lecture, 2 hr. per week; lab., 8 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.† MEDICAL BACTERIOLOGY. I. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry), Biochemistry 231 desirable. Detailed study of pathogenic microorganisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr. (Not offered 1955-56)
- 222.† PUBLIC HYGIENE. I. 2 hr. PR: Consent of instructor. Introduction into the principles of public health. Lecture 2 hr. per week.
- 224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.

- 320, 321. ADVANCED BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsia, and viruses. Graduate students only.
- 323, 324, 325, 326. RESEARCH IN BACTERIOLOGY. I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professor COOVER; Assistants SANDERS and FARLEY

139. GENERAL BIOCHEMISTRY. II. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics and Medical Technology. Open to other qualified students.
230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.
- 231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab. 8 hr.
- 237, 238. SEMINAR IN BIOCHEMISTRY. I, II. 1 hr. per semester. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.
- 330, 331. BIOCHEMICAL PREPARATIONS. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.
- 333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

- 275.† HISTORY OF MEDICINE. II. No Credit. A brief history of the development of the science and art of medicine. Lecture, 1 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, STARKEY and TAIT; Instructor JOHNSON

- 271.† PHYSICAL DIAGNOSIS. Yr. 3 hr. Lecture, 1 hr. per week during first semester; lecture, 1 hr. per week, lab., 2 hr. during first half of second semester; lecture, 2 hr. per week, practical work with patients, 2 hr. during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 272.† INTRODUCTORY MEDICINE. Yr. 3 hr. Medical clinic—demonstration of clinical cases, 2 hr. per week during first semester; lecture, 2 hr. per week during first half of second semester; lecture, 2 hr. demonstration of clinical cases, 2 hr. per week during second half of second semester. Hospital clerkship at Hopemont Sanitarium, 1 week.
- 273.† PSYCHOBIOLOGY. I. 1 hr. Introduction to the study of human personality, normal and abnormal. Lecture, 1 hr. per week.
- 274.† BIOSSTATISTICS. I. 1 hr. Planned to aid in the understanding of the statistical methods commonly used in medical and biological work, and in the evaluation of experimental data in these fields. Lecture, 1 hr. per week.

277.* CORRELATION CLINIC. I. 1 hr. Practical demonstrations of the relation of the basic sciences to clinical medicine using the case method. Members of the various basic science departments participate along with the Department of Medicine.

278.*CORRELATION CLINIC. II. 1 hr. A continuation of Medicine 277.

OBSTETRICS

Professor VAN LIERE

291.† OBSTETRICS. II. 2 hr. PR: Anatomy 201, 202 (Human Anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor MORGAN; Instructor EIRGOTT; Assistant CAMPBELL

150. ELEMENTARY HISTOLOGY. I. 3 hr. A study of the elements of histological structure, including blood. Lecture, 2 hr. per week; laboratory 3 hr. Required of students in Medical Technology. Other students as approved by the department.

151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.

251.† GENERAL AND TUMOR PATHOLOGY. I. 7 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.

252.† SPECIAL PATHOLOGY. II. 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture 2 hr. per week, lab., 2 hr. during second half of semester.

254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.

256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.

351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor WATTS; Assistant Professor MCKINNEY; Instructor HERRING; Lecturer TUCKER

160. FUNDAMENTALS OF PHARMACOLOGY. I. 5 hr. PR: Physiology 141. For students in the College of Pharmacy. Lecture 4 hr. per week; laboratory 3 hr.

262.† PHARMACODYNAMICS. I. 3 hr. PR: Physiology 141 or 242. Lecture, 3 hr. per week. The mechanism of action of drugs on living things. The fundamental relationships between drugs and drug action.

263.† MEDICAL PHARMACOLOGY. II. 4 hr. PR: Pharmacology 262. Lecture, 4 hr. per week, lab., 6 hr. first half of semester; lecture, 3 hr. per week, lab., 3 hr. second half of semester. The action of drugs commonly used clinically for man and animals.

266. BIOCHEMORPHOLOGY. II. 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. ANESTHESIOLOGY. I, II, S. 3 hr. PR: Physiology 243. Production of surgical anesthesia in man. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP and VAN LIERE; Associate Professor STICKNEY; Instructor LOGAN.

141. ELEMENTARY PHYSIOLOGY. I. 4 hr. PR: Biology 1, 2 or Zoology 1, 2, Chemistry 131 (Organic Chemistry) (or Conc.) For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr.
- 241.* PHYSIOLOGY. II. 9 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology for Medical Students. Lecture, 7 hr. per week; laboratory, 8 hr.
- 243.† PHYSIOLOGY. I. 7 hr. PR: Same as for Physiology 241. Physiology of circulation, respiration, digestion, metabolism, secretion, endocrines, special senses. Lecture, 5 hr. per week; lab., 6 hr. Not to be offered after 1955-56. (Included in Physiology 241.)
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE

281.† PRINCIPLES OF SURGERY. II. 2 hr. Lecture, 2 hr. per week during the first half of semester; lecture, 2 hr. per week during second half of semester, demonstrations of clinical cases and operative technique, 2 hr.

II. Curriculum in Medical Technology

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, etc., and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association, which inspects, evaluates, and approves schools. This School is included in the list of those approved by the American Medical Association. In this field, properly qualified persons, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, occupies two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser. Four years in all are required for the degree.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*

R. F. KRAUSE (Professor of Biochemistry)

R. G. SPEARS (Assistant Professor of Bacteriology)

E. J. VAN LIERE (Dean of Medical School)

REQUIREMENTS FOR ADMISSION

HIGH SCHOOL CREDITS REQUIRED

For admission to the curriculum in Medical Technology the applicant must have credit for at least 15 units of high school work. This must meet the requirements for admission to West Virginia University in the College of Arts and Sciences, including subjects specified in the *University Catalog*. In addition, one unit of plane geometry is desirable.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 semester hours, exclusive of military science, as specified below:

English. 12 semester hours. (Must include 6 hours composition and rhetoric, and 6 additional hours in literature.)

Modern Foreign Language. 12 hours.

Biological Science. 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry. 15 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 3 hours; qualitative analysis or physical chemistry, 4 hours.)

Physics. 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Students should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry or comparative anatomy.

Military training is required of all freshman and sophomore men in West Virginia University.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms obtainable from the School of Medicine. These must be presented at the Office of the Dean of the School. Application should be made in February of the second pre-technology year and they will be considered after April 1. At the time of making application the student, unless in residence at West Virginia University, should request the registrar of his college to send an official transcript of his work to the Medical School.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the Medical School.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in making selection of students. Applicants from other institutions should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

FEES

Students in Medical Technology pay the following fees: \$70 per semester for residents of West Virginia and \$245 for non residents; for the summer of the senior year \$4 per credit hour for residents and \$8 per credit hour for nonresidents. There is a breakage deposit of \$10 payable at the beginning of the final semester. Students not registered in the Medical School or the College of Pharmacy pay \$4 per credit hour for courses taught by members of the medical faculty in addition to the regular fee for the college in which registered.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

STANDARDS OF SCHOLARSHIP

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year with a grade-point average of 1.5 per registration hour.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During this year, students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Pathogenic bacteriology (220)	5	Elementary physiology (141)	4
Organic chemistry (131)	4	General biochemistry (139)	4
Comparative anatomy (231)	5	Parasitology (255)	4
Histology 150	3	Clinical laboratory diagnostic methods (151)	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygiene Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.

108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

MEDICAL STUDENTS 1954-55

FIRST YEAR STUDENTS (ENTERED SEPTEMBER 1954)

Allen, Kenneth Jean	Mountsville
Bailey, Donald Richard (A.B., University of Virginia, 1954)	Bluefield
Barich, Louis Luke (B.S., Pharm., University of Pittsburgh, 1953)	Rivesville
Bess, Robert William, Jr. (A.B., West Virginia University, 1953)	Piedmont
Chambers, Beverly Noe	Valley Fork
Coleman, Lowell Thomas	Ansted
Dinsmore, Harold Pattey	Hedgesville
Ferrell, Jimmy Lee	Kenova
Gocke, David Joseph	Fairmont
Greever, Carl Jackson (A.B., West Virginia University, 1954)	Welch
Hall, Phillip Warren (A.B., West Virginia University, 1952)	Clarksburg
Halloran, Earl Thomas (A.B., West Virginia University, 1954)	Hinton
Harrison, Hollister Summers (A.B., West Virginia University, 1954)	Canva
Hatfield, Sherman Eugene (A.B., West Virginia University, 1954)	Oceana
Hess, Robert Dale (A.B., West Virginia University, 1954)	Bridgeport
Hutchinson, Bernard Thomas	Sutton
Irons, George Benton, Jr.	Pickaway
Kosar, Geroge Stephen (A.B., University of Buffalo, 1954)	Weirton
Lancaster, Joseph Roy, Jr. (B.S., Shepherd College, 1954)	Charles Town
Larry, Ronald Colman	Mt. Clare
Lilly, William Douglas (B.S., Marshall College, 1954)	Dunbar
Mantini, Emil Louis (A.B., M.S., West Virginia University, 1950, 1952)	Morgantown
Pickett, Justus Cunningham (A.B., West Virginia University, 1954)	Morgantown
Rogers, Marcus Neil (A.B., Berea College, 1954)	Forest Hill
Rubin, Philip Morris (A.B., West Virginia University, 1954)	Charleston
Scott, James Russell (B.S., Marietta College, 1954)	Parkersburg
Stacks, Donald Pressley (A.B., University of Virginia, 1954)	Welch
Straley, David Barberry	Baileysville
Strother, Arnold Franklin	Clarksburg
Weaver, William Travis	Welch
Whitehair, Marshall Lee	Martinsburg
Williams, Patrick C. (A.B., Berea College, 1954)	White Sulphur Springs

SECOND YEAR STUDENTS (ENTERED SEPTEMBER 1953)

Bailey, Ronald James (A.B., West Virginia University, 1954)	Clarksburg
Barber, Daniel Brown (A.B., University of Chicago, 1950)	Charleston
Barger, Carl Clinton (A.B., West Virginia University, 1954)	Bluefield
Booher, William Thurlow (B.S., Bethany College, 1954)	Wellsburg
Brasuk, John Leo (A.B., West Virginia University, 1953)	Grant Town
Bullington, Walter Graham (A.B., West Virginia University, 1953)	St. Albans
Callison, Harper Thomas (A.B., West Virginia University, Jan. 1955)	Marlinton
Deem, John Richard (A.B., West Virginia University, 1953)	Clarksburg
Divita, Eugene Charles	Montgomery
Dorsey, Nellie Ray (B.S., West Virginia Wesleyan, 1953)	Holcomb
Fender, Bill Noel (B.S., Concord College, 1947)	Bramwell
Flanary, Jack Ronald (A.B., West Virginia University, 1954)	Yukon
Franklin, Norman	Wheeling
Green, Louis Eldred (A.B., West Virginia University, 1954)	Piedmont
Hark, William Henry (A.B., West Virginia University, 1954)	Charleston
Harrison, Thomas Harold (A.B., West Virginia University, 1953)	Huntington
Hendricks, Daniel Ewell	Shenandoah Junction
Jones, Carlena Lee	Huntington
Kiser, Joseph Corbin	Parkersburg
Lemley, John William (A.B., West Virginia University, 1953)	Morgantown
Mazzocco, Thomas Richard (A.B., West Virginia University, 1954)	Morgantown
Mesaros, Michael Paul (A.B., West Virginia University, Jan. 1955)	Follansbee
Miltenberger, Frederick William (B.S., Washington College, 1953)	Ridgeley

Pavilack, Sidney (A.B., West Virginia University, 1953)	Wheeling
Sheppe Jack Ogden (B.S., Marshall College, 1950)	Huntington
Stark, Thomas Hall (A.B., Duke University, 1950)	Huntington
Taylor, Leonard Edward (B.S., Concord College, 1952)	Princeton
Trinkle, Sarabeth	Weston
Wells, Charles Jack (B.S., Concord College, 1954)	Princeton

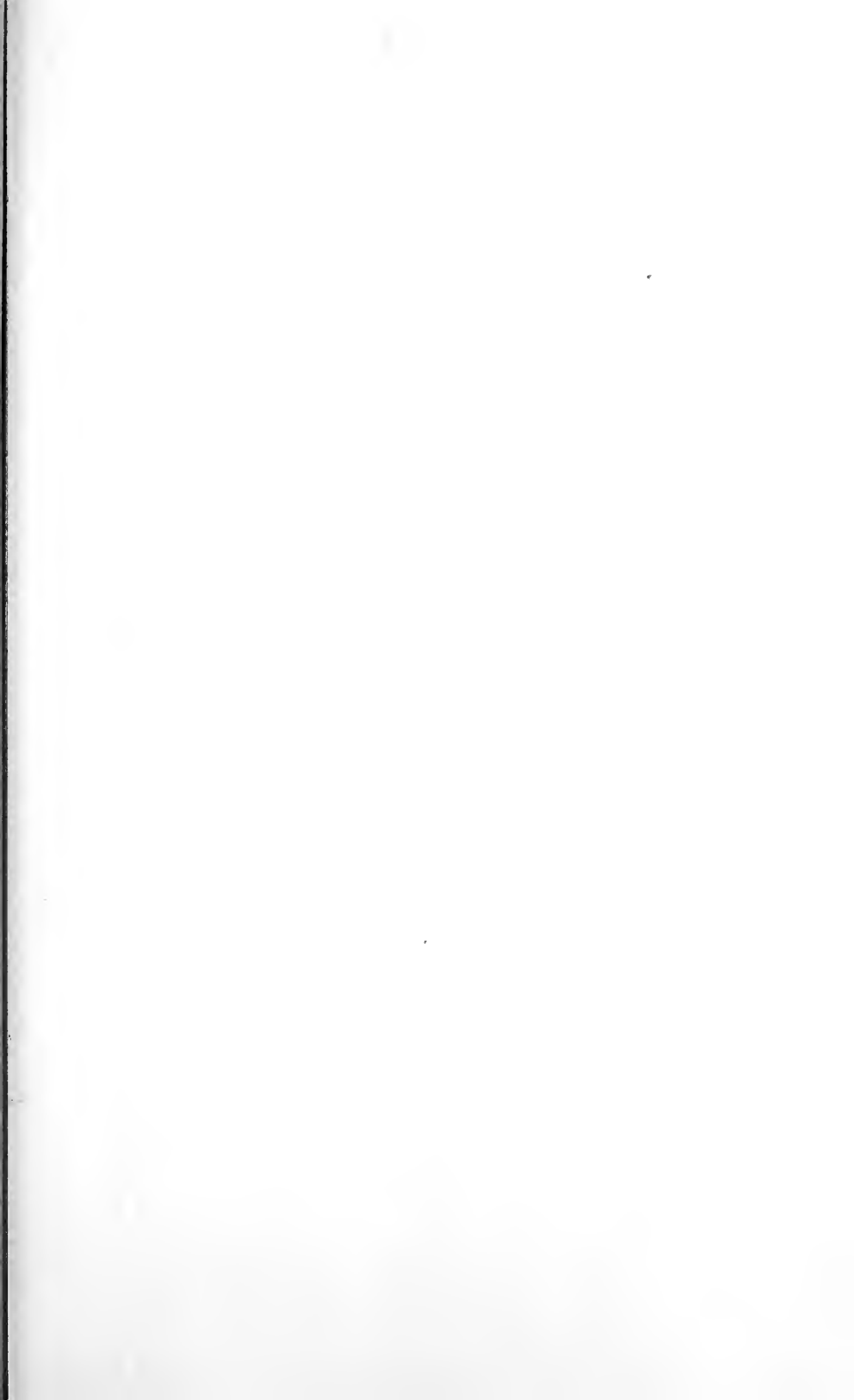
STUDENTS IN MEDICAL TECHNOLOGY

JUNIOR YEAR

Autoine, Barbara Joan	Clarksburg
Conrad, Con Lee	Grafton
Coppolino, Joseph Anthony	Mt. Pleasant, Pa.
Dayhoff, Lyle Stanley	St. Marys
Ferrante, Anna Elizabeth	Follansbee
Gessler, Anna Louise	Lumberport
Kerns, Patricia Ann	Fairmont
Manolakis, Elsie Antonett	Morgantown
McDowell, Leon Richard	Keyser
Sharpe, Anne Wagoner	Morgantown
Shuman, Eleanor Rose	Reedsville
Wayman, June Clyde	Wheeling
White, Susan White	Fairmont
Wiseman, Julia Ann	Summersville

SENIOR YEAR

Eppling, Betty Sue	Gap Mills
Gugliotta, Pasquale	Beckley
Harman, Phyllis Culp	Grafton
Hatfield, Katharine Santiago	Bluefield
Hicks, Betty Lou	Morgantown
Kinley, Lois	Clarksburg
Linkous, Peggy Jean	Holden
Murphy, Frances Rebecca	Morgantown
Robertson, Harriet Lee	Fairmont
Seckman, Clarence	Clarksburg
Taylor, Paul Harold	Hopemont
Thralls, Margaret Ann	Waynesburg, Pa.





WEST VIRGINIA UNIVERSITY

**THE SCHOOL OF
MEDICINE**

**WEST VIRGINIA UNIVERSITY BULLETIN
ANNOUNCEMENTS 1956 - 57**

YEAR 1956

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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YEAR 1957

JANUARY							FEBRUARY							MARCH						
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APRIL							MAY							JUNE						
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28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold face type.

UNIVERSITY CALENDAR

1956

June 2, Saturday	Alumni Day
June 3, Sunday	Baccalaureate Exercises
June 4, Monday	Commencement Day
June 6, Wednesday	Registration, first term, Summer Session
June 7, Thursday	First Classes, first term, Summer Session*
July 4, Wednesday	Independence Day, a holiday
July 17, Tuesday	Close of first term, Summer Session
July 18, Wednesday	Registration, second term, Summer Session
July 19, Thursday	First classes, second term, Summer Session*
August 24, Friday	Close of second term, Summer Session
September 10, Monday, to September 16, Sunday, inclusive ...	Freshman Week Program
September 14 and 15, Friday and Saturday	General Registration, first semester
September 17, Monday	First classes, first semester
October 9, Tuesday	Meeting of University Senate
November 5, Monday	Mid-semester reports due
November 6, Tuesday	Election Day, a holiday
November 22, Thursday, to November 25, Sunday, inclusive	Thanksgiving recess
December 22, Saturday to January 1, Tuesday, inclusive	Christmas recess

1957

January 16, Wednesday, to January 22, Tuesday, inclusive	Final examinations, first semester
January 28 and 29, Monday and Tuesday	General Registration, second semester
January 30, Wednesday	First classes, second semester
February 7, Thursday	West Virginia University Day
February 12, Tuesday	Meeting of University Senate
March 25, Monday	Mid-semester reports due
May 14, Tuesday	Meeting of University Senate
April 18, Thursday, to April 24, Wednesday, inclusive	Easter recess
May 24, Friday, to May 31, Friday, inclusive	Final examinations, second semester
May 30, Thursday	Memorial Day, a holiday
June 1, Saturday	Alumni Day
June 2, Sunday	Baccalaureate Exercises
June 3, Monday	Commencement Day

*Classes will be held on June 30, July 28, and August 4.

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WEST VIRGINIA UNIVERSITY

ESTABLISHED FEBRUARY 7, 1867

MORGANTOWN

The Board of Governors

	TERM EXPIRES
RAYMOND E. SALVATI, <i>President</i> , Huntington	1956
WILLIAM G. THOMPSON, <i>Vice-President</i> , Montgomery	1964
K. DOUGLAS BOWERS, <i>Secretary</i> , Beckley	1962
THOMAS E. MILLSOP, Weirton	1957
MRS. PAUL HAMMANN, Martinsburg	1958
E. G. OTEY, Bluefield	1959
THOMAS L. HARRIS, Parkersburg	1960
A. C. SPURR, Wheeling	1961
FRANK J. ZSOLDOS, Pineville	1963
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State College of West Virginia University.

West Virginia University Bulletin

Series 56, No. 6-9, December, 1955

Entered as second-class matter July 15, 1929, at the post-office
in Morgantown, W.Va., under the Act of August 24, 1912.

Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

- IRVIN STEWART, LL.B., A.B., A.M., Ph.D., LL.D., *President of the University*
BETTY BOYD, A.B., *Dean of Women*.
ROBERT FERGUSON MUNN, M.A., *Acting Librarian*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENER, B.A., *Comptroller*
J. EVERETT LONG, M.A., *Registrar of the University*
EDWARD JERALD VAN LIERE, B.A., M.S., M.D., Ph.D., Litt.D., F.A.C.P., *Dean and Professor of Physiology*
ALDERSON FRANCIS FRY, A.B., B.L.S., A.M., LL.B., *Medical Librarian*

THE FACULTY

PROFESSORS

- EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; Ph.D., University of Chicago, 1927; Litt.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; Ph.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1917. Ph.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy and Chairman of Committee on Admissions and Scholarship*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; Ph.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., Ph.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE, *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., Rochester, 1942; M.D., Vermont, 1951.
DANIEL THOMAS WATTS, *Professor of Pharmacology*, A.B., Elon College, 1937; Ph.D., Duke University, 1942.

ASSOCIATE PROFESSORS

- CECIL BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

*Part time. In private practice.

- THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*
B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.
- JOHN CLIFFORD STUCKNEY, *Associate Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; Ph.D., University of Minnesota, 1940.

ASSISTANT PROFESSORS

- GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.
- FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.
- ARCHIE LEMUEL STARKEY,* *Assistant Professor of Medicine (Physical Diagnosis) (Superintendent of Hopemont Sanitarium)*
B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.
- H. SINCLAIR TAIT,* *Assistant Professor of Psychiatry (Superintendent of Weston State Hospital)*
M.D.C.M. Dalhousie University, 1914; F.A.P.A., 1952.
- RALPH GORDON SPEARS, *Assistant Professor of Bacteriology*
B.S., M.D., Northwestern University, 1947, 1951.
- GORDON R. MCKINNEY, *Assistant Professor of Pharmacology*
A.B., DePauw University, 1946; M.S., University of Notre Dame, 1948; Ph.D., Duke University, 1951.
- WILLIAM KNOX HARRELL, *Assistant Professor of Bacteriology*
B.S., University of Arkansas, 1947; M.S., University of Oklahoma, 1949; Ph.D., University of Michigan, 1954.
- EDWIN CHARLES GANGLOFF, *Assistant Professor of Biochemistry*
B.A., M.S., Ohio State University, 1945, 1947; Ph.D., Wayne University, 1955.
- JOHN BARKER HARLEY, *Assistant Professor of Pathology*
B.S., Dickinson College, 1943; M.D., University of Maryland, 1946.
- LEROY HALLOWELL SAXE, *Assistant Professor of Pharmacology*
B.S., Shippensburg (Pa.) State Teachers College, 1938; A.M., Ph.D., University of Pennsylvania, 1940, 1951.
- HUGH ALEXANDER LINDSAY, *Assistant Professor of Physiology*
B.Sc., M.Sc., University of Western Ontario, 1949, 1952; Ph.D., University of Toronto, 1955.

INSTRUCTORS

- CARL EDWARD JOHNSON,* *Instructor in Medicine*
A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.
- MAYNARD PRIDE,* *Instructor in Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve, 1939.
- WILLIAM AUGUST EHIGOTT,* *Instructor in Pathology*
B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.
- JOHN B. HYDE, *Instructor in Anatomy*
B.S., University of South Dakota, 1944; Ph.D., University of Minnesota, 1953.
- CARROLL RAYBOURNE BALL, *Instructor in Anatomy*
B.A., M.S., University of Mississippi, 1947, 1948.
- FRANK ANTHONY CARONE, *Instructor (part time) in Pathology*
B.A., West Virginia University, 1948; M.D., Yale Medical School, 1952.
- BETHOLENE FRANCIS LOVE, *Instructor in Pathology*
B.S., Western Reserve University, 1946; M.S., Oklahoma University, 1950.

ASSISTANTS

- PATRICIA O'CONNER SANDERS, *Research Assistant in Biochemistry*
B.S., West Virginia University, 1952.
- HELEN MARY PAVLECH, *Assistant in Bacteriology*
B.S., M.A., West Virginia University, 1938, 1950.
- RENATE GOHANNA FARLEY, *Laboratory Assistant in Biochemistry*
Med. Tech., Tuebinge, Germany, 1948.

*Part time. In private practice.

- DANE WOOD MOORE, JR., *Research Assistant in Bacteriology*
B.S., Alderson Broaddus College, 1950.
- PATRICIA ANN HATHAWAY, *Research Assistant in Bacteriology*
B.S., West Virginia University, 1954.
- ARTHUR DANE BRAGG, *Research Assistant in Pharmacology*
B.S., Virginia Polytechnic Institute, 1952.

LECTURERS

- ELDON BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Connecticut, 1921.
- NEWMAN ALLEN DYER,* *Lecturer in Public Hygiene*
B.A., West Virginia University, 1950; M.D., Medical College of Virginia, 1952.

TECHNICIANS

- FABRY LIVINGSTONE HAWK, *Laboratory and X-Ray Technician in Pathology*
Registered Medical Technologist.
- WILLIS G. LEMLEY, *Laboratory Technician in Anatomy*
A.B., West Virginia University, 1942.
- HAROLD A. DOVE, *Animal Caretaker and Technician in Pharmacology and Physiology*
- DONNA JEAN BARICH, *Laboratory Technician in Bacteriology*
- KATHERINE SANTIAGO HATFIELD, *Tissue Technologist in Pathology*
B.S., West Virginia University, 1955.

CLERICAL PERSONNEL

- MILDRED F. FISHER, *Secretary to the Dean*
- PEGGY MARIE MURPHY, *Secretary and Record Clerk*
- MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946
- DORIS MAE LEWIS, *Secretary in Bacteriology and Pharmacology*
- MILDRED SHORTRIDGE CLARK, *Secretary, Medical Library*
A.B., M.S., West Virginia University, 1941.
- MARY LUCILLE WALLER, *Secretary in Medicine and Anatomy*

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

- JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
- CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
- HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
- EDGAR FRANK HEISKELL, JR.,* *Assistant Physician*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University Medical School, 1943.
- REGINALD FREDERICK KRAUSE, *Physician (part time) and Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., University of Rochester, 1942; M.D., University of Vermont, 1951.
- FRANK ANTHONY CARONE, *Physician (Part-time) and Instructor (Part-time) in Pathology*
B.A., West Virginia University, 1948 M.D.; Yale Medical School, 1952.

NURSES

- HELEN LOUISE KUDLA, R.N.
- MARY LEE NEAL, R.N.
- MARGARET ANN YARBROUGH, R.N.
- PATRICIA ANN BELL, R.N.
- PHYLLIS JEAN LINGER, R.N.
- FRANCES TAYLOR STAMATTOU, R.N.

TECHNICIANS

FABRY LIVINGSTONE HAWK, *Chief Technician in the University Health Service*

Registered Medical Technologist

BETHOLENE FRANCES LOVE, *Technician*

B.S., Western Reserve University, 1946; M.S., Oklahoma University, 1950.

BERNADETTE MARIE KIRBY, *Technician*

A.A., Potomac State College, 1954.

CLERICAL PERSONNEL

HELEN CLARISSA O'NEILL, *Secretary in the University Health Service*

A.A., Immaculata College, 1936; B.S., West Virginia University, 1955.

ETHEL FEATHER ELLIS, *Receptionist in the University Health Service*

MARGARET ANNE WALTER, *Clerk in the University Health Service*

STANDING COMMITTEES

Admissions and Scholarship: S. B. CHANDLER (chairman), C. K. SLEETH, M. L. HOBBS, R. F. KRAUSE, and D. T. WATTS.

Library: S. B. CHANDLER (chairman), J. C. STICKNEY, C. K. SLEETH, C. R. BALL, G. R. MCKINNEY, W. K. HARRELL, and E. C. GANGLOFF.

Research, Fellowship, and Grants: D. W. NORTHUP (Chairman), M. L. HOBBS, J. M. SLACK, E. J. VAN LIERE, R. F. KRAUSE, and D. T. WATTS.

Seminars: J. J. LAWLESS (chairman), J. C. STICKNEY, E. J. VAN LIERE, J. B. HYDE, and G. R. MCKINNEY.

Clinical and Special Facilities: C. K. SLEETH (chairman), C. B. PRIDE, M. L. HOBBS, G. R. MAXWELL, F. R. WHITLESEY, J. J. LAWLESS, MAYNARD PRIDE, E. B. TUCKER, and C. E. JOHNSON.

Curriculum: C. K. SLEETH (chairman), E. J. VAN LIERE, T. W. WILLIAMS, D. T. WATTS, R. F. KRAUSE, and R. G. SPEARS.

Student Loans and Scholarships: J. C. STICKNEY (chairman), E. J. VAN LIERE, T. W. WILLIAMS, J. B. HYDE, D. T. WATTS, and L. R. SAXE.

Medical Technology: M. L. HOBBS (chairman), R. F. KRAUSE, E. J. VAN LIERE, R. G. SPEARS, and BETHOLENE F. LOVE.

Policy: Heads of departments and the director of the University Health Service.

Graduate Study: J. M. SLACK (chairman), J. C. STICKNEY, R. F. KRAUSE, D. T. WATTS, and L. R. SAXE.

Social: J. C. STICKNEY (chairman), J. B. HYDE, C. R. BALL, J. B. HARLEY, and W. K. HARRELL.

Animal House: D. T. WATTS (chairman), J. C. STICKNEY, C. R. BALL, E. J. VAN LIERE, R. F. KRAUSE, and W. K. HARRELL.

Building Committee: J. M. SLACK (chairman), M. L. HOBBS, R. F. KRAUSE, J. J. LAWLESS, C. K. SLEETH, E. J. VAN LIERE, T. W. WILLIAMS, and J. C. STICKNEY.

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The School of Medicine as now organized had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of the American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. Degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

PROPOSED EXPANSION OF THE SCHOOL OF MEDICINE

Recently the West Virginia Legislature made provision for the establishment of a four-year School of Medicine as well as Schools of Dentistry and Nursing. This means that an increased number of students will be accepted and that the M.D. degree will be granted.

A contract has now been let for the construction of the Basic Sciences Building which will house the pre-clinical departments of the School of Medicine as well as the Schools of Dentistry, Nursing, and Pharmacy. This building will be ready in the Fall of 1957, thus it is likely that an increased class of medical students will be accepted in 1957 or 1958.

Preliminary plans for a teaching hospital are now being prepared and when the unit is completed it will be possible for West Virginia to confer the M.D. degree.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, at Hopemont, West Virginia, is approved by the American Medical Association for residency. It has approximately 400 beds primarily for pulmonary diseases, but a number of beds are set aside for other medical and surgical cases. The School of Medicine has access to this hospital for teaching purposes and the Superintendent and certain members of the staff become University officials. This arrangement provides an affiliation for instruction in clinical examination of patients.

Monongalia General Hospital and Vincent Pallotti Hospital, two local general hospitals with bed capacities of approximately 130 and 100 respectively, make their facilities available to the School of Medicine for teaching purposes by special arrangement between their administrative officers and the school.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from the Vincent Palotti Hospital, Monongalia General Hospital, Hopemont Sanitarium, and the private practice of physicians of the area. This arrangement materially augments the pathological museum, which already numbers about 1,750 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence.

BUILDINGS AND EQUIPMENT

The three-story Medical Building furnishes room for most of the School of Medicine. On the first floor are the offices of the Dean, a general lecture room, a reading and study room, and the pharmacological laboratory. On the second floor are laboratories for bacteriology and physiology. On the third floor are laboratories for gross and microscopic anatomy, a large lecture room, and the X-ray room. All departments have appropriate offices, technical rooms, and storage space. Embalming and cadaver storage rooms are in the basement. Quarters for experimental animals are provided in separate buildings.

The biochemical laboratory occupies rooms in the Chemistry Building. The department office is Room 430; communicating with it are three rooms used as stock and preparation rooms and for research.

The Department of Pathology occupies rooms on the second floor of the University Health Center; a good-sized laboratory-lecture room and the necessary rooms for a museum, preparations, storage, offices, and private laboratories.

LIBRARY

The Medical Library is not organized as a separate unit but is housed in the University Library, where publications of prime importance to the students and faculty of the School of Medicine are to be found in close proximity to related biological and chemical publications. Purely chemical works, many of which are of interest in medicine, are housed in the Chemistry Building which is adjacent to the Library. Additional current issues of essential medical journals and periodicals of general scientific interest are conveniently available in the students' lounge in the School of Medicine.

There are about 18,000 catalogued volumes in the Library which constitute the medical collection. Roughly half of these are bound volumes of periodicals; the remainder are textbooks and monographs concerned with pre-clinical fields for the most part but comprising also better representative works in internal medicine, surgery, gynecology, obstetrics, public health, hygiene, and history of medicine. Certain other publications are available on bibliofilm, for which reading facilities are offered in the Library and in the Department of Bacteriology. The Library has a subscription list of over 150 leading medical journals. Various departments of the School of Medicine receive a number of special journals, and the Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

The Library maintains an inter-library loan system whereby materials not contained in the Library may be borrowed from the Surgeon General's Library,

Library of Congress, or other libraries. Complete sets of various abstracting journals, including the Quarterly Cumulative Index Medicus, may be found in the general reading room of the Library. Library service is available to physicians of the state through loans of publications or through the furnishing of photostatic copies of articles.

The interests of the Medical Library are furthered by a full-time librarian who works in conjunction with a committee of the faculty of the School of Medicine.

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 P.M. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. Registration fees for residents are \$264; for nonresidents, \$700 per academic year. There is an annual breakage deposit of \$10, part of which is usually returned at the end of the year. The total legitimate cost of a nine-month session for medical students in residence will range from \$1,000 to \$1,500 exclusive of traveling expenses. The School of Medicine furnishes microscopes for students without charge.

LOANS AND PART-TIME EMPLOYMENT

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, others available to students of all colleges in the University. For information about loans, inquiries should be made to Director Joseph C. Gluck, Committee on Prizes, Scholarships, and Loan Funds, West Virginia University, Morgantown.

A few part-time jobs are available on the general campus and in the School of Medicine. Concerning these, inquiries may be made to the Placement Bureau of the University or to the School of Medicine.

LIVING ACCOMMODATIONS

Medical students, as a rule, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the University dormitories. It is suggested that women contact the Office of the Dean of Women for information concerning off-campus housing, men may obtain such information from the Information Desk in the Administration Building. All arrangements with the landlady or landlord must be made personally by the student.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions of the School of Medicine, composed of members of the medical faculty. Admission is by recommendation of this committee and with the approval of the Dean of the School.

WHEN TO APPLY FOR ADMISSION

Application for admission in September 1957 should be made promptly upon completion of the school year 1955-56 (June 1956). Applications will be considered until the class is filled, but early application is very advantageous.

HOW TO APPLY FOR ADMISSION

Application for admission must be made upon blanks which may be obtained from the Dean of the School of Medicine, West Virginia University, Morgantown, West Virginia. A small, unmounted photograph must accompany the application. The completed application should be returned promptly to the School of Medicine.

CREDENTIALS

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the School of Medicine, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the School of Medicine.

RE-APPLICATIONS

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must be a graduate of an accredited high school.

COLLEGE CREDITS REQUIRED

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which have been approved by appropriate agencies for premedical education.

Applicants from other colleges will receive consideration based upon the merits of the individual case.

Credits submitted by applicants for work done elsewhere than at West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The applicant should present a broad general education including, whenever possible, a major in some field, not necessarily a natural science. The Committee on Admissions needs evidence of excellence of academic performance and steady progress toward a goal. An excess of credit hours or higher degrees does little to offset the disadvantage of low grades in securing admission to medical schools. The practice of repeating courses to raise the grade is discouraged. Applicants who have been subject to suspension from this or other medical schools can be admitted only in very exceptional cases and at the discretion of the Committee on Admissions.

The requirements outlined below may be met in either of two ways: First and preferably, by pursuing a course of study leading toward a Bachelor's degree with major and minor fields of the applicant's own choosing, or secondly, by following a more rigidly prescribed curriculum generally offered as a "Pre-Medical" curriculum.

The applicant must present credit from a college of recognized standing for at least 90 semester hours of work exclusive of military science and physical education.

These credits must include the following minimum requirements:

English Composition and Rhetoric 6 hr.

Biological Sciences 12 hr.

Must include 8 hours of General Zoology or 8 hours of General Biology.
Comparative Vertebrate Anatomy is desirable, Vertebrate Embryology
is suggested.

Chemistry 16 hr.

Must include inorganic chemistry and organic chemistry (aliphatic and
aromatic.)

Physics 8 hr.

Psychology 3 hr.

Two years of modern foreign language is suggested.

MEDICAL COLLEGE ADMISSION TEST

The score on this test is used as one criterion of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Tests are announced for May and November of each year. It is of advantage to applicants to take the test in May, inasmuch as many acceptances will be issued before the November scores are available. Students should consult premedical advisers about making application more than a month in advance of the announced dates.

PERSONAL ATTRIBUTES

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Good health is a necessary qualification.

RECOMMENDATIONS

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, two instructors in different science departments to send letters of recommendation to the School of Medicine. A letter from the family physician, clergyman, or some other individual who has known the applicant over a period of years is useful.

NOTIFICATION OF APPLICANTS

All applicants will be informed of the action of the Committee on Admissions as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of registration in the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant. The deposit paid by students under the G.I. Bill of Rights will be refunded after the full tuition for the semester has been paid.

GENERAL RULES OF THE SCHOOL OF MEDICINE

REGISTRATION

All medical students are expected to register at the Medical Building on the days set apart for registration at the beginning of each semester as announced in the calendar on page 1.

No student will be permitted to register in the School of Medicine after the first week of classes.

Persons who are not registered as students in the University and who are not members of the administrative or teaching staffs shall not be admitted to regular attendance in School of Medicine classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Scholarship Committee and the professor in charge of the course.

TUITION AND OTHER FEES

All fees are due and payable at the Comptroller's Desk in the Field House on the days of registration.¹ Fees paid after registration days must be paid at the Office of the Comptroller in the Administration Building.

	Residents	Non-Residents
Full-time students (per semester) Tuition	\$87.00	\$305.00
University Fees	45.00	45.00
Total	\$132.00	\$350.00
Part-time students (per semester hour)	8.00	26.00
Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4 per credit hour in addition to the fee charged in the college or school in which they are registered.		
Breakage deposit (for year)		\$10.00
Breakage deposit for University students not regularly enrolled in medical school, for one laboratory course, \$5, and for more than one course, \$10.		

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Scholarship. (University Rule.)

For medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Scholarship Committee.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

PROMOTIONS AND SUSPENSIONS

The Committee on Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Scholarship Committee.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

¹Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester or a summer term, shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Scholarship Committee of the School of Medicine. This permission is not valid until it has been reported to the Registrar for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the School of Medicine during the semester should do so in regular manner. Consult the Dean's office for steps which must be taken.

CURRICULUM REVISION

The curriculum of the School of Medicine is constantly under study by a special committee and by all members of the faculty. In the interests of offering the best possible course of instruction, curriculum revisions are made from time to time.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia as noted on page 7.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

Proficiency in English. The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their college work after June 1, 1952. Students in Medicine and Medical Technology who have not satisfied this requirement must take this examination in their first semester of registration in the School of Medicine.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. Medical students may work toward this degree by study during four summer terms (two full summers.) For fuller information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements of the Graduate School*.

Only a small number of graduate students can be accommodated in departments of the School of Medicine. Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

COURSES OF INSTRUCTION

NOTE—Courses marked "*" are required of first-year students; those marked "+" are required of second-year students.

The following abbreviations are used in designating the semester during which these courses are offered, and also the credit hours of each course:

- I—a course given in the first semester.
- II—a course given in the second semester.
- I, II—a semester course given in each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course offered in the Summer Session.
- hr.—number of credit hours per course.

For convenience each course is designated by the name of the department offering the course and the number of the course. The plan for numbering courses at West Virginia University is as follows:

- Courses 1 to 99—offered primarily for freshmen and sophomores
- Courses 100 to 199—offered primarily for juniors and seniors
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates
- Courses 300 to 399—offered to graduates only

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information, see *Announcements of the Graduate School*.

ANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructors HYDE and BALL

- 201.* GROSS ANATOMY. I. 6 hr. PR: General Zoology. Comparative Anatomy and Embryology desirable. Gross structure of the human body, including pertinent aspects of embryonic development. Lecture, 2 hr. per week; lab. 7 hr.
- 202.* GROSS ANATOMY. II. 5 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 3 hr. per week; lab., 7 hr.
- 203.* NEUROANATOMY. II. 5 hr. PR: Anatomy 201. The gross and microscopic structure of the nervous system with notes on its embryonic development. 3 hr. per week; lab. 6 hr.
- 205.* MICROSCOPIC ANATOMY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. The minute anatomy and functional aspects of tissues and organs, with brief reviews of their embryonic development. Lecture, 3 hr. per week; lab., 9 hr.

BACTERIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professors SPEARS and HARRELL; Lecturer DYER; Assistant PAVELECH

- 220. PATHOGENIC BACTERIOLOGY. II. S. 5 hr. PR or Conc.: Chemistry 131 (Organic Chemistry). For students in Medical Technology and Pharmacy. Detailed study of microorganisms with emphasis on those causing human diseases. Lecture, 2 hr. per week; lab., 8 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.† MEDICAL BACTERIOLOGY. I. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry), Biochemistry 231 desirable. Detailed study of pathogenic microorganisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr.
- 222.† PUBLIC HYGIENE. II. 2 hr. PR: Consent of instructor. Introduction to the principles of public health. Lecture 2 hr. per week.
- 224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.

- 320, 321. **ADVANCED BACTERIOLOGY.** I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsiae, and viruses. Graduate students only.
- 323, 324, 325, 326. **RESEARCH IN BACTERIOLOGY.** I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professor GANGLOFF; Assistants SANDERS and FARLEY.

139. **GENERAL BIOCHEMISTRY.** II. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics and Medical Technology. Open to other qualified students.
230. **APPLIED BIOCHEMISTRY.** S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.
- 231.* **MEDICAL BIOCHEMISTRY.** I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab. 8 hr.
- 237, 238. **SEMINAR IN BIOCHEMISTRY.** I, II. 1 hr. per semester. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.
- 330, 331. **BIOCHEMICAL PREPARATIONS.** I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.
- 333, 334, 335, 336. **RESEARCH IN BIOCHEMISTRY.** I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

- 275.† **HISTORY OF MEDICINE.** I. 1 hr. A brief history of the development of the science and art of medicine. Lecture, 1 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, STARKEY and TAIT; Instructor JOHNSON

- 277.* **CORRELATION CLINIC.** I. 1 hr. Practical demonstrations of the relation of the basic sciences to clinical medicine using the case method. Members of the various basic science departments participate along with the Department of Medicine.
- 278.* **CORRELATION CLINIC.** II. 1 hr. A continuation of Medicine 277.
- 291.† **PHYSICAL DIAGNOSIS.** I. 2 hr. Lecture and demonstration of the technique of taking clinical histories and performing physical examinations.
- 292.† **PHYSICAL DIAGNOSIS.** II. 1 hr. Practical experience in examination of normal and abnormal subjects.
- 293.† **INTRODUCTORY MEDICINE.** I. 1 hr. Lectures and demonstrations of patients exhibiting the cardinal manifestations of disease and specific disease entities.
- 294.† **INTRODUCTORY MEDICINE.** I. 1 hr. A continuation of Medicine 293.

OBSTETRICS

Professor VAN LIERE

- 291.† **OBSTETRICS.** II. 2 hr. PR: Anatomy 201, 202 (Human Anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor HARLEY; Instructors EHRCOTT, LOVE, and CARONE

150. **ELEMENTARY HISTOLOGY. I.** 3 hr. A study of the elements of histological structure, including blood. Lecture, 2 hr. per week; laboratory 3 hr. Required of students in Medical Technology. Other students as approved by the department.
151. **CLINICAL LABORATORY DIAGNOSTIC METHODS. II.** 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† **GENERAL AND TUMOR PATHOLOGY. I.** 6 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† **SPECIAL PATHOLOGY. II.** 3 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture 2 hr. per week, lab., 2 hr. during second half of semester.
- 254.† **CLINICAL PATHOLOGY. II.** 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.
256. **ADVANCED PATHOLOGY. I or II.** 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. **EXPERIMENTAL PATHOLOGY. I or II.** 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor WATTS; Assistant Professors MCKINNEY and SAXE; Lecturer TUCKER

160. **FUNDAMENTALS OF PHARMACOLOGY. I.** 5 hr. PR: Physiology 141. For students in the College of Pharmacy. Lecture, 4 hr. per week; laboratory, 3 hr.
- 262.† **MEDICAL PHARMACOLOGY. II.** 6 hr. PR: Physiology 141 or 242. Origin, chemistry, pharmacodynamics, toxicology, therapeutic use and dosage of drugs commonly used in man and animals with emphasis on the fundamental mechanisms of drug action. Lecture, 5 hr. per week; lab., 6 hr. per week.
266. **BIOCHEMORPHOLOGY. II.** 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. **BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S.** 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. **ADVANCED PHARMACOLOGY. I, II, S.** 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. **TOXICOLOGY. I, II, S.** 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. **ANESTHESIOLOGY. I, II, S.** 3 hr. PR: Physiology 243. Production of surgical anesthesia in man and animals. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.

- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP and VAN LIERE; Associate Professor STICKNEY; Assistant Professor LINDSAY

141. ELEMENTARY PHYSIOLOGY. I. 4 hr. PR: Biology 1, 2 or Zoology 1, 2; PR or concurrent: Chemistry 131 (Organic Chemistry). For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr. per week.
- 241.* PHYSIOLOGY. II. 9 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology for Medical Students. Lecture, 7 hr. per week; laboratory, 8 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE; in cooperation with members of the Department of Anatomy.

- 281.† PRINCIPLES OF SURGERY AND SURGICAL ANATOMY. I. 2 hr. Lecture and demonstration of the importance of Anatomy to clinical surgery.
- 282.† PRINCIPLES OF SURGERY. II. 1 hr. Demonstration of clinical cases and operative techniques.

II. Curriculum in Medical Technology

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, etc., and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association, which inspects, evaluates, and approves schools. This School is included in the list of those approved by the American Medical Association. In this field, properly qualified persons, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, occupies two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser. Four years in all are required for the degree.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*

R. F. KRAUSE (Professor of Biochemistry)

R. G. SPEARS (Assistant Professor of Bacteriology)

E. J. VAN LIERE (Dean of the School of Medicine)

REQUIREMENTS FOR ADMISSION

For admission to the curriculum in Medical Technology, the applicant must have graduated from high school and present at least 15 units of high school work acceptable to the University. In addition, one unit of plane geometry is desirable.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 hours, exclusive of military science,* as specified below:

English. 12 semester hours. (Must include 6 hours composition and rhetoric and 6 additional hours in literature.)

Modern Foreign Language. 12 hours.

Biological Science. 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry. 16 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 4 hours; Organic Chemistry, 4 hours.)

Physics. 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Students should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry or comparative anatomy.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms obtainable from the School of Medicine. These must be presented at the Office of the Dean of the School. Application should be made in February of the second pre-technology year and they will be considered after April 1. At the time of making application the student, unless in residence at West Virginia University, should request the registrar of his college to send an official transcript of his work to the School of Medicine.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the School of Medicine.

*Two years of Military Science and Tactics or Air Science is required of all freshmen and sophomore men at West Virginia University, unless exempt by the provisions listed on page 24.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in making selection of students. Applicants from other institutions should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

FEES

Students in Medical Technology pay the following fees: \$70 per semester for residents of West Virginia and \$245 for non residents; for the summer of the senior year \$4 per credit hour for residents and \$8 per credit hour for nonresidents. There is a breakage deposit of \$10 payable at the beginning of the final semester. Students not registered in the School of Medicine or the College of Pharmacy pay \$4 per credit hour for courses taught by members of the medical faculty in addition to the regular fee for the college in which registered.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year with a grade-point average of 1.5 per registration hour.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During this year, students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Sem.</i>	<i>Hr.</i>	<i>Second Sem.</i>	<i>Hr.</i>
Pathogenic bacteriology (220)	5	Elementary physiology (141)	4
Comparative anatomy (231)	5	General biochemistry (139)	4
Histology 150	3	Parasitology (255)	4
Biochemistry	arr.	Clinical laboratory diagnostic methods (151)	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygiene Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES, Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.

101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

III. General University Information

ADMISSION REQUIREMENTS

Candidates for admission to the University must be at least sixteen years of age. They may be admitted either by examination or on the basis of official transcripts of record. Transcripts of secondary school record must be sent by the principal directly to the Registrar of the University immediately after the student's graduation;¹ transcripts of college or university record must be sent by the registrar of the other institution directly to the Registrar of the University immediately after the student has completed his work in that institution. Transcripts should be received by the Registrar of the University at least three weeks prior to the beginning of the term or semester in which the applicant is interested. The transcripts received in support of applications for admission become the property of the University and are permanently filed in the office of the Registrar.

Applicants for admission who do not have transcripts showing graduation from accredited secondary schools on file in the office of the Registrar of the University or who do not have official transcripts from colleges or universities previously attended on file in the office of the Registrar of the University, may, at the discretion of the Committee on Admissions, be permitted to register provisionally. If satisfactory transcripts cannot be obtained, the registration will be cancelled and the fees paid by the applicant will be returned, in accordance with the University refund schedule. A provisional registration will not be continued for a period longer than one week.

Conditional Admission. Students must make up all deficiencies before they can be classified as sophomores.

SPECIAL STUDENTS

Mature students, offering at least nine units of the requirements for admission, including two units of English, may, upon written application to the Committee on Admissions, be permitted to register as special students. Special students must make up all deficiencies before they can be classified as sophomores.

ENTRANCE UNITS

A unit in any subject represents the amount of work that may be done in a standard high school year of thirty-six weeks, with five recitation periods per week, of no less than forty minutes each. In courses where laboratory work is required, from two to three periods of laboratory work are considered the equivalent of one period of recitation according to the amount of outside preparation required in connection with such work.

For admission to West Virginia University the student must have graduated from high school and present 15 units of high school work acceptable to the University.

A. The following groups are required:

1. Four units of English.²
2. Three units in a second subject.
3. Two units in each of two other subjects.
4. One unit of plant geometry is required of premedical and predental students and of students who intend to select chemistry, geology, mathematics, or physics as their major subject.

Either the three-unit subject or one of the two-unit subjects must include one unit of algebra.

B. Work in the following subjects not to exceed the number of units placed after each subject will be accepted.

¹In accrediting West Virginia secondary schools the University follows the classification made by the State Supervisor of High Schools.

²A student may enter the University with 3 units of English and satisfy admission requirements by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition, or English 1, Composition and Rhetoric.

<i>Subject</i>	<i>Units</i>	<i>Subject</i>	<i>Units</i>
English ²	4	Science ⁵	
Journalism	1	Biology ⁶	1
Speech	1	Botany ⁶	1
Foreign languages ³		Chemistry	1
French	3	General Science	1
German	3	Geology	1
Greek	3	Physical Geography	1
Italian	3	Physics	1
Latin	4	Physiology	1/2
Spanish	3	Zoology ⁶	1
Education	2	Commercial geography	1/2
Mathematics, General	1	Commercial law	1/2
Algebra	2	Vocational subjects (not to	
Plane geometry	1	exceed 5 units)	
Solid geometry	1/2	Agriculture	4
Trigonometry	1/2	Home Economics	3
History and Social Science ⁴		Industrial training	3
History	3	Bookkeeping, or bookkeeping	
Social Science	3	and commercial arithmetic	2
Drawing		Commercial arithmetic (alone) ..	1/2
Free-hand drawing	1	Shorthand	2
Mechanical drawing	1	Typing	1
Music	2	Aeronautics	1
		Art	1
		Hygiene	1
		Physical education	1

CREDIT ACCEPTED FROM A JUNIOR COLLEGE

The maximum credit accepted from a junior college accredited by the North Central Association of Colleges and Secondary Schools or other regional accrediting association will not exceed seventy-two (72) semester hours, and credit will be allowed for lower division courses only. No credit will be allowed for courses completed in a junior college subsequent to attainment of junior or higher rank by the student at the University.

ADVANCED STANDING EXAMINATION

Application for advanced standing on work of college grade for which college credit cannot be established on the basis of official transcript of record, should be made to the Registrar of the University not later than two weeks after the applicant's matriculation. Upon payment of the proper fee the Registrar will issue an examination permit. After examination, the department will report to the Registrar the University course, if any, for which the applicant is entitled to credit.

DIVISION OF MILITARY SCIENCE AND TACTICS AND AIR SCIENCE

Requirements

West Virginia University, a beneficiary of the Act of Congress of 1862, offers in time of peace, four-year courses of instruction in Military Science and Tactics and Air Science. Successful completion of one of these courses leads to a commission as Second Lieutenant in the United States Army Reserve, or the United States Air Force Reserve. Distinguished Military Graduates of West Virginia University may apply for and be offered commissions as second lieutenants in the Regular Army or the Regular Air Force, under conditions prescribed by law.

The course comprises two years of basic training (Military Science 1, 2, 3, and 4, or Air Science 1, 2, 3, and 4), two years of advanced training (Military Science 105, 106,

³One unit of Latin will be accepted. No less than 2 units of either French, German, Greek, Italian, or Spanish will be accepted unless sufficient additional work in that language is taken in college to complete a minimum of 2 units.

⁴A group of 3 units may be formed by combining 2 units of history with 1 unit of social science.

⁵A group of 2 or 3 units in science may be made by combining 1 unit each of any two or three of the following: physics, chemistry, biology, geology.

⁶If a student presents one unit in biology for admission, he may have credit for no more than 1/2 unit in either botany or zoology.

107, and 108, or Air Science 105, 106, 107, and 108), and summer camp for six weeks duration for Military Science students and four weeks summer training for Air Science students during the summer following the junior year. The Army summer camp and Air Force summer training is conducted at government expense, and eligible students are paid \$78 monthly in addition to traveling expenses at the rate of 5 cents per mile.

All male students not specifically exempt by provisions of the appropriate paragraph below are required by chapter eighteen, article eleven, of the official code of West Virginia, and by orders of the Board of Governors of the University, to complete satisfactorily the entire course as prerequisite to graduation from the University.

Within deferment quotas established by Public Law 758, 80th Congress, qualified and selected enrolled students are offered the opportunity of being deferred by the Professor of Military Science and Tactics or Professor of Air Science from military service under the Selective Service Act of 1948 and Selective Service Extension Act of 1950, as amended by the Universal Military Training and Service Act, November, 1951, as amended, until completion of their military courses, and receipt of their baccalaureate degree. Such deferment is subject to cancellation should the student not be selected for the advanced course, fail to remain in good standing, or to develop the qualities expected of an officer.

Curriculum

Basic instruction is given for three hours per week throughout the two semesters of each school year. Two hours' credit is allowed for each semester's work.

The third and fourth years of instruction in Military Science and Air Science, corresponding to the junior and senior years of the student, comprise the advanced course and are entirely elective on part of the student and selective on part of the Professor of Military Science and Tactics and Professor of Air Science. Application for advanced training should be made at the beginning of the second semester of the student's sophomore year.

Enrollment in the advanced courses, Army ROTC or Air Force ROTC, is elective on the part of those students who may be selected by the President of the University and the Professor of Military Science and Tactics or the Professor of Air Science, under regulations prescribed by the Secretary of the Army or the Secretary of the Air Force. Each student who shall have enrolled in either advanced course shall complete that course and, if tendered, accept a commission in a reserve component of the Army or Air Force upon completion of the course as a prerequisite for his graduation from the University, unless he is excused from this requirement by the authority of the Secretary of the Army or the Secretary of the Air Force.

All Army advanced course military science students follow the same curriculum on the basis of five hours per week. Assignment to branch of Army ROTC students is made by the Department of the Army during the fourth year of instruction based upon the preferences of the student, his personal qualifications, civilian occupational and military experience, academic curriculum pursued, and the needs of the Army. Three hours' credit is allowed for each semester completed.

Advanced Air Science students follow a common course of instruction for all students on the basis of five hours per week. Three hours' credit is allowed for each semester completed.

Students with twelve months or more of previous honorable active service are eligible to apply for enrollment in the Army advanced course immediately upon entrance into the University for the fall semester of their junior year. Students with less than twelve months service, but more than six, will be eligible to apply for enrollment in the advanced course only upon completion of Military Science 3 and 4. Students with prior service desiring to enter Advanced Air Science must have their status as to enrollment determined by the Professor of Air Science at the time of initial enrollment in the University.

Allowances

Commutation of subsistence, in the amount of the current value of the field ration (0.90 per day during the Fiscal Year 1956), will be paid monthly to each student taking the advanced course. In addition, uniforms, equipment, and textbooks are furnished all military and air science students by the government.

Military Deposit

Each student is financially responsible for all government property he is issued. A deposit of \$10 will be given to the Comptroller, at time of registration to cover any loss or damage to Government property while in his possession. This deposit, less a nominal administrative charge, will be refunded upon return of the undamaged property.

Exemptions

The following students will not be required to enroll in the Division of Military Science and Tactics and Air Science but may elect to do so with the approval of the Professor of Military Science and Tactics or the Professor of Air Science:

- (1) Those who are not citizens of the United States.
- (2) Those who, at time of entrance, are more than 23 years of age, and former students over that age who re-enter the University after an absence of three years.
- (3) Graduate students.
- (4) Students who are taking only the short course, the special interim courses, or extension work.
- (5) Students who at time of matriculation have successfully completed not less than 58 hours of work, and all who have completed the two-year basic Army ROTC or Air Force ROTC course at an institution maintaining a senior division unit. Those who have satisfactorily completed one, two, three, or four semesters in a senior division will be allowed comparable credit. Students who have had previous training, other than in a senior division ROTC unit, or service will be allowed credit as determined by the Professor of Military Science and Tactics or the Professor of Air Science and the Registrar of the University.
- (6) Students who are unable to perform military duty for physical reasons.

Exemptions will be determined by the adviser from the student's records and from recommendations of the Director of the Student Health Service.

Students with one year or more previous honorable active service are exempted from taking basic military training (i.e., Military or Air Science 1, 2, 3, 4). Students with more than six months, but less than one year's service are exempted from taking the first year of basic military training (i.e., Military or Air Science 1, 2). Note curriculum in connection with advanced course work.

Organization

The Division of Military Science and Tactics and Air Science and the conduct of military science and air science instruction is the responsibility of the Professor of Military Science and Tactics, and Professor of Air Science who, together with their military staffs, are officers and non-commissioned officers of the Army and Air Force, appointed by the Department of the Army and Department of the Air Force for duty at West Virginia University.

Reserve Officers Training Corps Bands

There is an Army ROTC Band and an Air Force ROTC Band. Membership is restricted respectively to basic Army and Air Force ROTC students. Assignment to one of the bands is determined by audition before the Director of the Band.

REGISTRATION

Persons who are not registered as students in the University or who are not members of its administrative or teaching staffs shall not be admitted to regular attendance in University classes.

All students are expected to register on the days set apart for registration at the beginning of each semester or term of the University. All freshmen are required to take intelligence, placement, medical, and physical tests.

Immediately after completion of their registration, all students are expected to pay their fees at the Comptroller's Desk in the Field House.

WITHDRAWAL FROM THE UNIVERSITY

A student who desires to withdraw from the University must obtain a withdrawal card from the office of the Registrar. Withdrawal procedure will be explained to him when he obtains the card.

Students who withdraw from the University without permission will receive at the end of the semester or term a grade of "F" (failure) in each of the subjects for which they are registered and will be indefinitely suspended from the University.

Students who desire to drop part of their work may withdraw from classes in which they are enrolled with a grade of "W" at any time prior to the end of the second week following the date set for midsemester reports. Withdrawal permit must be approved by the adviser and filed with the Registrar. If such withdrawal reduces the student's hours below the required minimum, the permit must be approved by the Scholarship Committee. Withdrawals after the above date will be permitted only in exceptional cases and must be approved by the Scholarship committee of the college in which the student is registered.

RE-ENTRY AFTER WITHDRAWAL

Students required to withdraw from one college of the University because of failure in their work and permitted to transfer to another college or school of the University may not again register in the college in which they were originally registered without the consent of the Scholarship Committee of that college.

CAMPUS PARKING REGULATIONS, FEES AND CHARGES

Students are required to observe all rules and regulations of the University with respect to the parking of motor vehicles on the campus, the fees for parking permits, and the fines or charges imposed for the violation of such rules and regulations. A student who fails to pay any such fine or charge imposed on him during any semester or term will be denied the right to graduate or to reregister, as the case may be, as well as the right to obtain a transcript, until full payment is made.

ENGLISH PROFICIENCY EXAMINATION

Each undergraduate who begins college work after June 1, 1952, must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take the examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary. The examination shall be administered by the English Proficiency Board.

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

A—excellent—given only to students of superior ability and attainment

B—good—given to those students who are well above average but who are not in the highest group

C—fair—average students

D—poor but passing

I—incomplete

F—failure

W—all withdrawals prior to end of second week following date for mid-semester reports

WP—withrew passing

WF—withrew failing

X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF"—0. When the grade of "I" becomes converted into a grade carrying credit the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination, including blood tests, urinalysis, and X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes four physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped with about 20 beds and operated as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

MEDICAL STUDENTS 1955-56

FIRST YEAR STUDENTS (ENTERED SEPTEMBER 1955)

Anderson, Charles Daniel	Ripley
Antalis, James Peter (A.B., West Virginia University, 1955)	Weirton
Appling, John Morgan (B.A., Emory and Henry College, 1955)	Bluefield
Ball, Gene Virgil (B.S., Fairmont State College, 1952)	Fairmont
Bekenstein, William Leon (A.B., West Virginia University, 1951)	Charleston
Brasuk, Virginia May	Grant Town
Coyner, John Ligon	Marlinton
Crutchley, William Frederick	Clarksburg
Fearnow, Ronald Grayson	Charles Town
Gainer, James Vincent, Jr.	Tunnelton
Ghaphery, Alfred David (B.S., University of Notre Dame, 1955)	Wheeling
Gillespy, William Greene	Huntington
Harris, Robert Miller (A.B., Johns Hopkins University, 1955)	Lewisburg
Jones, William Reynolds	Nitro
Kendall, Juneus Frederick	South Charleston
Leadbetter, Robert Lewin (A.B., West Virginia University, 1955)	Morgantown
Mangus, Jimmie Lee (B.S., Pharm., West Virginia University, 1954)	South Charleston
Mason, Robert Mack (B.S., Fairmont State College, 1955)	Fairmont
Muntzing, William Henry, II (A.B., West Virginia University, 1955)	Moorefield
Neale, Richard Carroll	Princeton
Power, Mary Ann (A.B., West Virginia University, 1955)	Martinsburg
Powers, James Edward	Bluefield
Sloan, Alexander Maxwell (B.S., University of Maryland, 1955)	Clarksburg
Staats, Okey James (B.A., University of Virginia, 1955)	Huntington
Traugh, George Holton, Jr. (A.B., West Virginia University, 1955)	Fairmont
Ward, Kenneth Vandiver (A.B., West Virginia University, 1952)	Piedmont
Weiler, Robert Richards (A.B., West Virginia University, 1955)	Wheeling
Wells, Hawey Adolphus, Jr.	Athens
Williams, Lawrence Alden	Morgantown
Woodrum, Anne Johnson (A.B., West Virginia University, 1955)	Cedar Grove
Znoy, Joseph Marion	Weirton

SECOND YEAR STUDENTS (ENTERED SEPTEMBER 1954)

Allen, Kenneth Jean	Moundsville
Bailey, Donald Richard (B.A., University of Virginia, 1954)	Bluefield
Barich, Louis Luke (B.S., Pharm., University of Pittsburgh, 1953)	Rivesville
Bess, Robert William (A.B., M.S., West Virginia University, 1953, 1955)	Piedmont
Chambers, Beverly Noe	Valley Fork
Coleman, Lowell Thomas (A.B., West Virginia University, 1955)	Jodie
Dinsmore, Harold Pattey (A.B., West Virginia University, 1955)	Hedgesville
Ferrell, Jimmy Lee	Kenova
Gocke, David Joseph	Fairmont
Greever, Carl Jackson (A.B., West Virginia University, 1954)	Welch
Hall, Phillip Warren (A.B., West Virginia University, 1951)	Clarksburg
Harrison, Hollister Summers (A.B., West Virginia University, 1954)	Canva
Hatfield, Sherman Eugene (A.B., West Virginia University, 1954)	Oceana
Hess, Robert Dale (A.B., West Virginia University, 1954)	Bridgeport
Hutchinson, Bernard Thomas (A.B., West Virginia University, 1955)	Sutton
Irons, George Benton, Jr. (A.B., West Virginia University, 1955)	Pickaway
Kosar, George Steven (B.A., University of Buffalo, 1954)	Weirton
Lancaster, Joseph Roy (B.S., Shepherd College, 1954)	Charles Town
Larry, Ronald Colman (A.B., West Virginia University, 1955)	Mount Clare
Lilly, William Douglas (B.S., Marshall College, 1954)	Dunbar
Mantini, Louis Emil (A.B., M.S., West Virginia University, 1950, 1952)	Morgantown
Pickett, Justus Cunningham (A.B., West Virginia University, 1954)	Morgantown
Rogers, Marcus Neil (A.B., Berea College, 1954)	Forest Hill
Rubin, Philip Morris (A.B., West Virginia University, 1954)	Charleston
Stacks, Donald Pressley (B.S., University of Virginia, 1954)	Welch

Strother, Arnold Franklin (A.B., West Virginia University, 1955) Clarksburg
 Weaver, William Travis Welch
 Whitehair, Marshall Lee (A.B., West Virginia University, 1955) Martinsburg
 Williams, Patrick C. (A.B., Berea College, 1954) White Sulphur Springs

STUDENTS IN MEDICAL TECHNOLOGY

JUNIOR YEAR

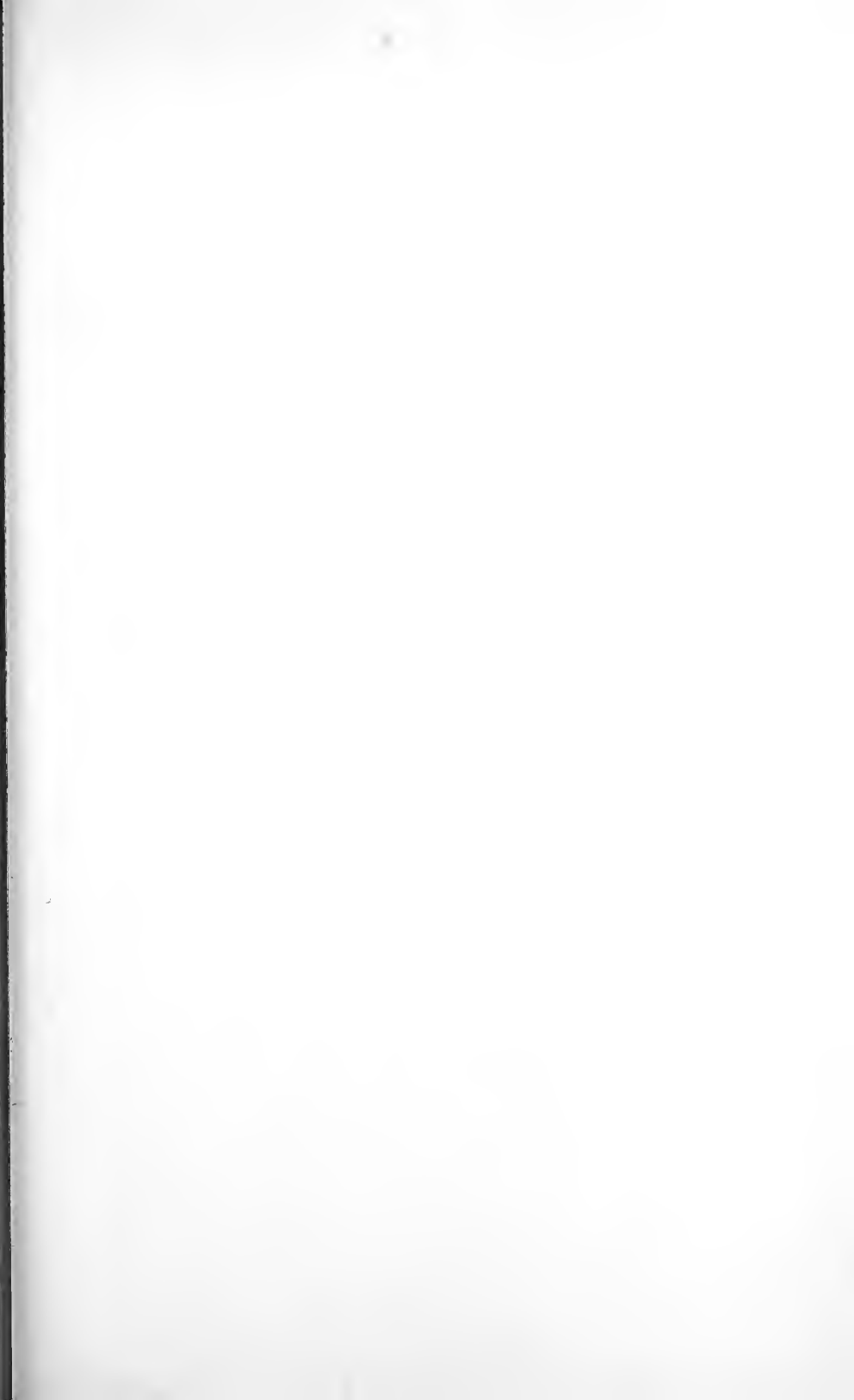
Bergdoll, Ann Marie Martinsburg
 Blair, Mary Elizabeth Parkersburg
 Cassell, Virginia Gay Williamson
 Caussin, Janet Lee Clarksburg
 Gregory, Carol Jean Clarksburg
 Gregory, Nancy Morgantown
 Hamilton, Jane Dagmar Clarksburg
 Macdonald, Marilyn Joan Wheeling
 Morgan, Doris Anne Oceana
 Sieber, Ruth Anne Wheeling
 Swope, Joan Virbell Morgantown
 Vannoy, Phyllis Ilene Morgantown
 Wardle, Suzanne Morgantown
 Witt, Peggy Jean Fairmont
 Zinn, Nancy Jean Buckhannon

SENIOR YEAR

Antoine, Barbara Joan Clarksburg
 Coppolino, Joseph Anthony Mt. Pleasant, Pa.
 Dayhoff, Lyle Stanley St. Marys
 Ferrante, Anna Elizabeth Follansbee
 Gessler, Anna Louise Lumberport
 Kerns, Patricia Ann Fairmont
 McDowell, Leon Richard Keyser
 Manolakis, Elsie Antonett Morgantown
 Sharpe, Anne Wagoner Morgantown
 Shuman, Eleanor Rose Reedsville
 Wayman, June Clyde Wheeling
 White, Susan Carol Fairmont
 Wiseman, Julia Ann Summersville







SCHEDULE OF COURSES FOR 1956-57

Course	Hr. Per Week			Hr. Per Semester			Semester Credit Hours
	Lect.	Lab.	Total	Lect.	Lab.	Total	
First Year—First Semester							
Gross Anatomy 201	2	7	9	32	112	144	6
Microscopic Anatomy 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	8	12	64	128	192	7
Correlation Clinic 277	1	0	1	16	0	16	1
First Year—Second Semester							
Gross Anatomy 202	3	7	10	48	112	160	5
Neuroanatomy 203	3	6	9	48	96	144	5
Physiology 241	7	8	15	112	128	240	9
Correlation Clinic 278	1	0	1	16	0	16	1
Second Year—First Semester							
Medical Bacteriology 221	3	9	12	48	144	192	6
General and Tumor Pathology 251	4	10	14	64	160	224	6
Physical Diagnosis 291	1	1	2	16	16	32	1
Introductory Medicine 293	1	1	2	16	16	32	1
History of Medicine 275	1	0	1	16	0	16	1
Principles of Surgery and Surgical Anatomy 281	1	1	2	16	16	32	2
Second Year—Second Semester							
Public Hygiene 222	2	0	2	32	0	32	2
Special Pathology 252	2	2	4	32	32	64	3
Clinical Pathology 254	3	7	10	48	112	160	3
Medical Pharmacology 262	5	6	11	80	96	176	6
Physical Diagnosis 292	0	2	2	0	32	32	1
Introductory Medicine 294	1	1	2	16	16	32	1
Principles of Surgery 282	0	2	2	0	32	32	1
Introduction to Obstetrics 291	2	0	2	32	0	32	2

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Biochemistry						Anatomy			
T	Anatomy						Anatomy			
W	Biochemistry						Anatomy			
Th	Anatomy						Anatomy			
F	Biochemistry						Anatomy	Medicine		

FIRST YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Physiol	Anatomy					Physiol	Anatomy		
T	Physiology						Physiol	Anatomy		
W	Anatomy									
Th	Physiology						Physiol	Anatomy	Medicine	
F	Anatomy						Physiology			

SECOND YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Medicine or Surgery						Pathology			
T	Bacteriology						Pathology			
W		H.Med.	Phys. Diagnosis							
Th	Bacteriology						Pathology			
F	Bacteriology						Pathology			

SECOND YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Surgery	Hygiene	Medicine				Pathology	Medicine		
T	Pharmacology						Pathology			
W	Pharmacology									
Th	Pharmacology		Obstet.				Pathology			
F	Phys. Diag.	Hygiene	Obstet.				Pathology			



WEST VIRGINIA UNIVERSITY

The School of

MEDICINE

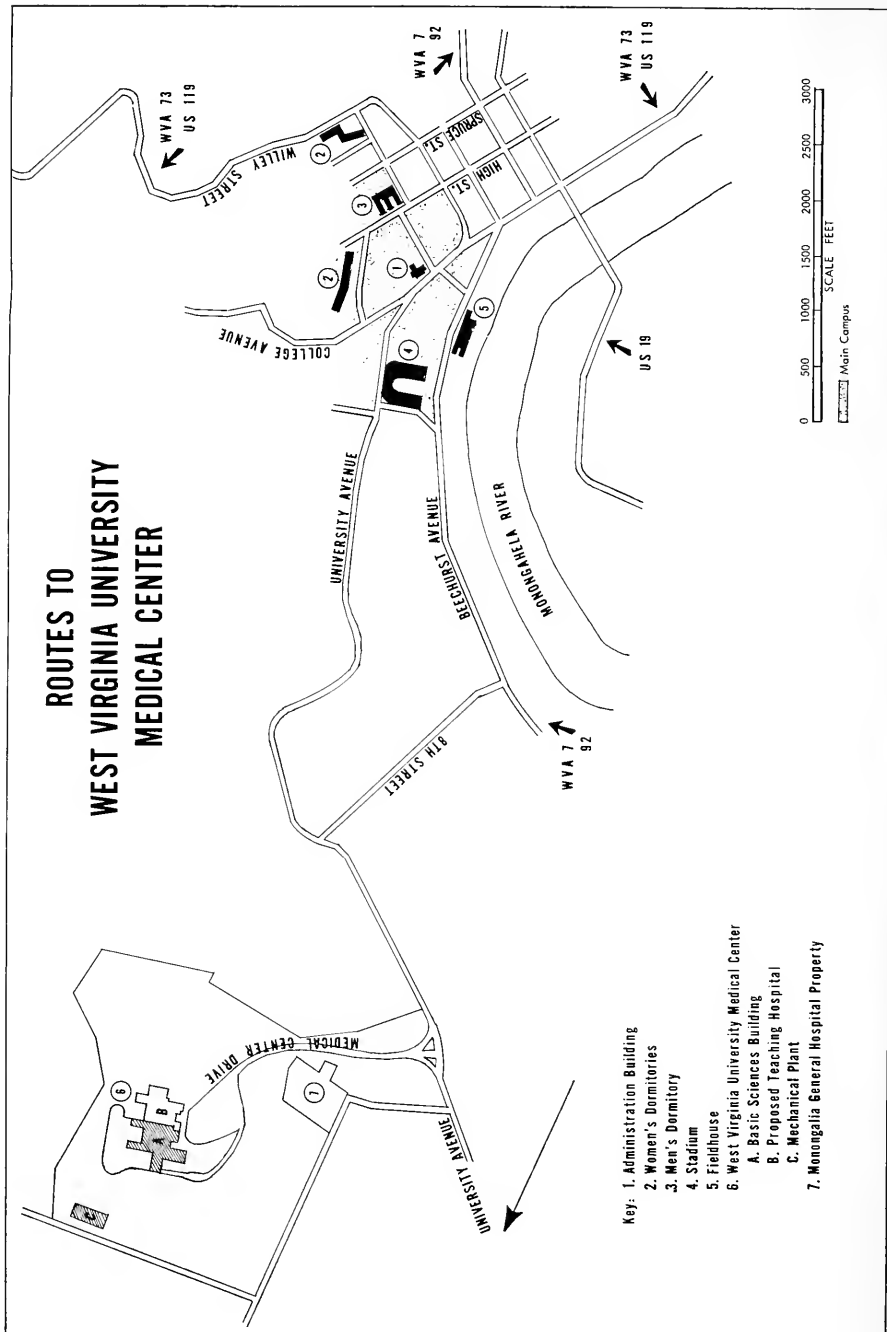
The Medical Center



WEST VIRGINIA UNIVERSITY BULLETIN

ANNOUNCEMENTS—1957-58 SESSION

ROUTES TO WEST VIRGINIA UNIVERSITY MEDICAL CENTER



UNIVERSITY CALENDAR

1957

June 1, Saturday	Alumni Day
June 2, Sunday	Baccalaureate Exercises
June 3, Monday	Commencement
June 10, Monday	Registration for First Term, Summer Session
June 11, Tuesday	First Classes, First Term, Summer Session*
July 4, Thursday	Independence Day, a holiday
July 19, Friday	Close of First Term, Summer Session
July 22, Monday	Registration for Second Term, Summer Session
July 23, Tuesday	First Classes, Second Term, Summer Session*
August 28, Wednesday	Close of Second Term, Summer Session
September 9, Monday, to September 15, Sunday, inclusive ...	Freshman Week Program
September 13, Friday and September 14, Saturday	General Registration for First Semester
September 16, Monday	First Classes, First Semester
October 8, Tuesday	Meeting of University Senate
November 4, Monday	Mid-Semester Reports Due
November 28, Thursday, to December 1 Sunday, inclusive	Thanksgiving Recess
December 19, Thursday, to January 2, Thursday, inclusive	Christmas Recess

1958

January 17, Friday, to January 23, Thursday, inclusive	Final Examinations for First Semester
January 29, Wednesday, and January 30, Thursday .	Registration for Second Semester
January 31, Friday	First Classes, Second Semester
February 7, Friday	West Virginia University Day
February 11, Tuesday	Meeting of University Senate
March 24, Monday	Mid-Semester Reports Due
April 3, Thursday, to April 9, Wednesday, inclusive	Easter Recess
May 13, Tuesday	Meeting of University Senate
May 23, Friday, to May 29, Thursday, inclusive.	Final Examinations for Second Semester
May 30, Friday	Memorial Day, a holiday
May 31, Saturday	Alumni Day
June 1, Sunday	Baccalaureate Exercises
June 2, Monday	Commencement

*Classes will be held on June 29, August 3, and August 10.

WEST VIRGINIA UNIVERSITY

ESTABLISHED FEBRUARY 7, 1867

MORGANTOWN

The Board of Governors

	TERM EXPIRES
WILLIAM G. THOMPSON, <i>President</i> , Montgomery	1964
A. C. SPURR, <i>Vice-President</i> , Wheeling	1961
K. DOUGLAS BOWERS, <i>Secretary</i> , Beckley	1962
THOMAS E. MILLSOP, Weirton	1957
MRS. PAUL HAMMANN, Martinsburg	1958
E. G. OTEY, Bluefield	1959
THOMAS L. HARRIS, Parkersburg	1960
FRANK J. ZSOLDOS, Pineville	1963
RAYMOND E. SALVATI, Huntington	1965
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State College of West Virginia University.

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Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

- IRVIN STEWART, LL.B., A.B., A.M., PH.D., LL.D., *President of the University*
BETTY BOYD, A.B., *Dean of Women*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENER, B.A., *Comptroller*
J. EVERETT LONG, M.A., *Registrar of the University and Chairman of the University Committee on Admissions.*
ROBERT FERGUSON MUNN, M.A., *Acting Librarian*
EDWARD JERALD VAN LIERE, B.A., M.S., M.D., PH.D., LITT.D., F.A.C.P., *Dean and Professor of Physiology*
ALDERSON FRANCIS FRY, A.B., B.L.S., A.M., LL.B., *Medical Center Librarian*
LYLE E. HEROD, A.B., M.S., *Assistant Registrar, Medical Center*

THE FACULTY

PROFESSORS

- EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; PH.D., University of Chicago, 1927; Litt.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; PH.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S. Purdue University, 1914; M.S., Pennsylvania State College, 1913; PH.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor of Gross Anatomy and Neuroanatomy and Chairman of Committee on Admissions and Scholarship*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists, Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; PH.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Bacteriology and Public Hygiene*
A.B., M.S., PH.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE, *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; PH.D., Rochester, 1942; M.D., Vermont, 1951.
DANIEL THOMAS WATTS, *Professor of Pharmacology*
A.B., Elon College, 1937; PH.D., Duke University, 1942.

ASSOCIATE PROFESSORS

- CECIL BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., PH.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.

*Part time. In private practice.

- CLARK KENDALL SLIETH, *Associate Professor of Medicine and Assistant Director of Health Service*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
- THOMAS WALLEY WILLIAMS, *Associate Professor of Histology and Anatomy*
B.S., M.S., Ph.D., University of Pittsburgh, 1934, 1937, 1939.
- JOHN CLIFFORD STICKNEY, *Associate Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; Ph.D., University of Minnesota, 1940.

ASSISTANT PROFESSORS

- GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.
- FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.
- ARCHIE LEMUEL STARKEY,* *Assistant Professor of Medicine (Physical Diagnosis) (Superintendent of Hopemont Sanitarium)*
B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.
- H. SINCLAIR TAIT,* *Assistant Professor of Psychiatry (Superintendent of Weston State Hospital)*
M.D.C.M., Dalhousie University, 1914; F.A.P.A., 1952.
- GORDON R. MCKINNEY, *Assistant Professor of Pharmacology*
A.B., DePauw University, 1946; M.S., University of Notre Dame, 1948; Ph.D., Duke University, 1951.
- WILLIAM KNOX HARRELL, *Assistant Professor of Bacteriology*
B.S., University of Arkansas, 1947; M.S., University of Oklahoma, 1949; Ph.D., University of Michigan, 1954.
- EDWIN CHARLES GANGLOFF, *Assistant Professor of Biochemistry*
B.A., M.S., Ohio State University, 1945, 1947; Ph.D., Wayne University, 1955.
- LEROY HALLOWELL SAXE, *Assistant Professor of Pharmacology*
B.S., Shippensburg (Pa.) State Teachers College, 1938; A.M., Ph.D., University of Pennsylvania, 1940, 1951.
- HUGH ALEXANDER LINDSAY, *Assistant Professor of Physiology*
B.Sc., M.Sc., University of Western Ontario, 1949, 1952; Ph.D., University of Toronto, 1955.
- FREDERICK JACKSON LOTSPEICH, *Assistant Professor of Biochemistry*
B.S., M.S., West Virginia University, 1948, 1952; Ph.D., Purdue University, 1955.
- LAURENCE LEE DUNCAN, *Assistant Professor of Pathology*
A.B., West Virginia Institute of Technology, 1950; B.S., West Virginia University, 1951; M.D., Baylor University, 1953.
- MARTIN RUSSELL ROSS, *Assistant Professor of Bacteriology*
B.A., University of Connecticut, 1950; M.S., University of Michigan, 1952; Ph.D., George Washington University, 1956.

INSTRUCTORS

- CARL EDWARD JOHNSON,* *Instructor in Medicine*
A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.
- MAYNARD PRIDE,* *Instructor in Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve, 1939.
- WILLIAM AUGUST EHRCOTT,* *Instructor in Pathology*
B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.
- JOHN B. HYDE, *Instructor in Anatomy*
B.S., University of South Dakota, 1944; Ph.D., University of Minnesota, 1953.
- CARROLL RAYBOURNE BALL, *Instructor in Anatomy*
B.A., M.S., University of Mississippi, 1947, 1948.
- BETHOLENE FRANCIS LOVE, *Instructor in Pathology*
B.S., Western Reserve University, 1946; M.S., Oklahoma University, 1950.
- JOHN BARKER HARLEY*, *Instructor in Medicine*
B.S., Dickinson College, 1943, M.D., University of Maryland, 1946.

ASSISTANTS

- HELEN MARY PAVLECH, *Assistant in Bacteriology*
B.S., M.A., West Virginia University, 1938, 1950.
*Part time. In private practice.
- DANE WOOD MOORE, JR., *Research Assistant in Bacteriology*
B. S., Alderson Broaddus College, 1950.
- THOMAS ROBERT POOLE, *Research Assistant in Pharmacology*
B.S., Marshall College, 1953.
- RICHARD HERBERT BISHOP, *Bacteriologist*
B.S., Hillsdale College (Michigan), 1953.

LECTURERS

- ELDON BRYANT TUCKER*, *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Connecticut, 1921.
- MICHAEL ANTHONY VIGGIANO, * *Lecturer in Public Hygiene*
A.M., B.S., West Virginia University, 1932, 1934; M.D., Rush Medical School, 1937; M.P.H., Johns Hopkins University, 1946.

TECHNICIANS

- FABRY LIVINGSTONE HAWK, *Assistant Director of Student Health Laboratory*
WILLIS G. LEMLEY, *Laboratory Technician in Anatomy*
A.B., West Virginia University, 1942.
- HAROLD A. DOVE, *Animal Caretaker and Technician in Pharmacology and Physiology*
- FRANCES REBECCA MURPHY, *Tissue Technician in Pathology*
B. S., West Virginia University, 1955.
- JOHN WILLIAM GORMAN, *Technician in Bacteriology*
B.S., Waynesburg College, 1954.
- JAMES BORMAN HAMMOND, *Technician in Bacteriology*
B.S., West Virginia University, 1951.
- OLGA D. WILLIAMS, *Technician in Bacteriology*
B.A., Temple University, 1945.

CLERICAL PERSONNEL

- MILDRED F. FISHER, *Secretary to the Dean*
- PEGGY MARIE MURPHY, *Secretary and Record Clerk*
- MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946
- MILDRED SHORTRIDGE CLARK, *Catalogue Assistant, Medical Center Library*
B.S., M.S., West Virginia University, 1941.
- ELIZABETH C. LEMON, *Secretary in Bacteriology*
- MARTHA J. MAYNARD, *Secretary (Part-time) in Pharmacology*
- MARGARET L. SIMMONS, *Secretary in Medicine*

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

- JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
- CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
- HUBERT ADAMS SHAFFER, * *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
- EDGAR FRANK HEISKELL, JR., * *Assistant Physician*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University Medical School, 1943.
- REGINALD FREDERICK KRAUSE, *Physician (part time) and Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., University of Rochester, 1942; M.D., University of Vermont, 1951.

*Part time. In private practice.

NURSES

HELEN LOUISE KUDLA, R.N.
MARGARET ANN YARBROUGH, R.N.
PATRICIA ANN BELL, R.N.
PHYLLIS JEAN LINGER, R.N.
FRANCES TAYLOR STAMATIOU, R.N.
MARTHA LORENE MORRIS, R.N.

TECHNICIANS

FABRY LIVINGSTONE HAWK, *Assistant Director of Student Health Laboratory*
BETHOLENE FRANCES LOVE, *Technician*
B.S., Western Reserve University, 1946; M.S., Oklahoma University, 1950.
BERNADETTE MARIE KIRBY, *Technician*
A.A., Potomac State College, 1954.

CLERICAL PERSONNEL

ETHEL FEATHER ELLIS, *Receptionist in the University Health Service*
MARGARET ANNE WALTER, *Secretary in the University Health Service*
ILLIAN PROTHFROE, *Clerk in the University Health Service*

STANDING COMMITTEES

Admissions and Scholarship: S. B. CHANDLER, (chairman), C. K. SLEETH, M. L. HOBBS, R. F. KRAUSE, D. T. WATTS, and L. E. HEROD.
Library: S. B. CHANDLER (chairman), G. R. McKINNEY (secretary), J. C. STICKNEY, C. K. SLEETH, W. K. HARRELL, E. C. GANGLOFF, and C. R. BALL.
Research, Fellowships, and Grants: D. W. NORTHUP (chairman), M. L. HOBBS, J. M. SLACK, E. J. VAN LIERE, R. F. KRAUSE, and D. T. WATTS.
Seminars: J. J. LAWLESS (chairman), J. C. STICKNEY, E. J. VAN LIERE, J. B. HYDE, and G. R. McKINNEY.
Clinical and Special Facilities: C. K. SLEETH (chairman), C. B. PRIDE, M. L. HOBBS, G. R. MAXWELL, F. R. WHITTLESEY, J. J. LAWLESS, MAYNARD PRIDE, E. B. TUCKER, and C. E. JOHNSON.
Curriculum: C. K. SLEETH (chairman), E. J. VAN LIERE, T. W. WILLIAMS, R. F. KRAUSE, and W. K. HARRELL.
Student Loans and Scholarships: J. C. STICKNEY (chairman), F. J. LOTSPEICH, T. W. WILLIAMS, D. T. WATTS, and L. H. SAXE.
Medical Technology: M. L. HOBBS (chairman), R. F. KRAUSE, E. J. VAN LIERE, W. K. HARRELL, and B. F. LOVE.
Policy: Heads of departments and the Director of the University Health Service.
Graduate Study: J. M. SLACK (chairman), D. W. NORTHUP, R. F. KRAUSE, and L. H. SAXE.
Social: J. C. STICKNEY (chairman), J. B. HYDE, L. L. DUNCAN, C. R. BALL, G. R. McKINNEY, and W. K. HARRELL.
Animal House: D. T. WATTS (chairman), J. C. STICKNEY, H. A. LINDSAY, R. F. KRAUSE, and M. R. ROSS.
Building Committee: J. M. SLACK (chairman), M. L. HOBBS, R. F. KRAUSE, J. J. LAWLESS, C. K. SLEETH, E. J. VAN LIERE, T. W. WILLIAMS and J. C. STICKNEY.
Student Fellowships: D. T. WATTS (chairman), W. K. HARRELL, E. J. VAN LIERE, and H. A. LINDSAY.

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The present School of Medicine had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of the American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by private arrangement, transfer to other medical schools of their own choice for the completion of the work.

EXPANSION OF THE SCHOOL OF MEDICINE

The West Virginia Legislature has made provision for the establishment of a four-year School of Medicine as well as schools of Dentistry and Nursing. This means that an increased number of students will be accepted and that the M.D. degree will be granted in the near future.

The Basic Sciences Building which will house the pre-clinical departments of the School of Medicine is expected to be ready for classes in the fall of 1957.

The plans for the Teaching Hospital have been completed and were approved by the Board of Governors. When the Hospital is completed it will be possible for the University to confer the M.D. degree.

BUILDINGS AND EQUIPMENT

BASIC SCIENCES BUILDING

It is expected that the School of Medicine will move from its present scattered locations over the University campus during the summer of 1957, and then occupy the Basic Sciences Building of the Medical Center. This Basic Sciences Building consists of a central core containing lecture rooms, laboratories, and other teaching facilities, to which are attached five wings. The core, measuring 225 by 225 feet, is five stories high, with the wings extending an additional 100 feet to the north, east, and west.

Located on the second, third, and fourth floors of this central area will be facilities for teaching anatomy, bacteriology, biochemistry, medicine, pathology, pharmacology, physiology, public health and preventive medicine, and surgery. The School of Dentistry will occupy the first floor, while the fifth floor will contain mechanical equipment.

The wings will house the Schools of Nursing and Pharmacy, as well as administrative offices, the Medical Center Library, and such student facilities as a lounge, locker rooms, book store, snack bar, cafeteria, and a post office. A 500-seat auditorium will occupy one entire wing.

MEDICAL CENTER LIBRARY

The Library is located on the second floor of the Administrative Wing, with a stack-well extending from the basement up through the center of the Library. With 20,000 square feet of floor space, exclusive of stacks, it will seat 300 students, house 160,000 volumes, and provide for all auxiliary services. On hand are 28,000 volumes of which more than half are periodicals. In the current periodical room about 600 foreign and domestic periodicals will be on display. Fourteen sound-proofed rooms will give space for small group study. There are also a conference room, history of medicine room, and space for microfilm, photostat, and films.

On hand is all the needed material for basic science courses, with excellent representation in the clinical field, to be expanded as the courses progress. While most of the material is in English, there will be outstanding periodicals and books in the major foreign languages. The History collection is being expanded to include good holdings in the secondary material, as well as outstanding original material. This collection is augmented with the holdings of the General University Library and the specialized chemistry library in the Chemistry Building on the main campus.

Associated with each department will be a Seminar Room planned to include a small relevant working library. The Department of Bacteriology has accumulated a collection of over 8,000 papers and anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

Material not available in this library may be obtained through inter-library loan from adjacent and large medical libraries throughout the country.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, at Hopemont, West Virginia, is approved by the American Medical Association for residency. It has approximately 400 beds primarily for pulmonary diseases, but a number of beds are set aside for other medical and surgical cases. The School of Medicine has access to this hospital for teaching purposes and the Superintendent and certain members of the staff are also members of the University staff. This arrangement provides an affiliation for instruction in clinical examination of patients.

Monongalia General Hospital and Vincent Pallotti Hospital, two local general hospitals with bed capacities of approximately 130 and 100 respectively, make their facilities available to the School of Medicine for teaching purposes by special arrangement between their administrative officers and the school.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from the Vincent Palotti Hospital, Monongalia General Hospital, Hopemont Sanitarium, and the private practice of physicians of the area. This arrangement materially augments the pathological museum, which already numbers about 1,750 specimens, and affords opportunity for teaching in gross pathology and medical jurisprudence.

ORGANIZATIONS AND LECTURESHIPS

SEMINAR

A seminar is attended by faculty and students of the School of Medicine on alternate Friday afternoons at 4 P.M. The program consists of presentation of various subjects of general interest, followed by discussion. At these meetings papers are presented by members of the faculty, the student body, and members of the medical profession not connected with the School. The papers deal with both preclinical sciences and various phases of the practice of medicine.

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

GIDEON STANHOPE DODDS LECTURESHIP

Some years ago a group of interested alumni contributed a fund for securing a portrait of Dr. Dobbs, long time professor of histology and embryology. Contributions were sufficiently generous that a substantial balance remained after paying for the portrait.

The income from this fund is now being used to bring to the campus, periodically, some outstanding worker in the field of microscopic anatomy or embryology.

EXPENSES; HOUSING; FINANCIAL AID

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. For information concerning tuition and other fees see the table on page 12. The total legitimate cost of a nine-month session for medical students will range from \$1,000 to \$1,500 exclusive of traveling expenses.

LIVING ACCOMMODATIONS

Medical students, as a rule, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the University dormitories. It is suggested that women contact the Office of the Dean of Women for information concerning off-campus housing, men may obtain such information from the Information Desk in the Administration Building. All arrangements with the landlady or landlord must be made personally by the student.

LOANS AND PART-TIME EMPLOYMENT

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, and

others are available to students of all colleges in the University. For information about loans, inquiries should be made to Joseph C. Gluck, Director of Student Affairs, West Virginia University.

A few part-time jobs are available on the campus and in the School of Medicine. Inquiries concerning these may be made to the University Placement Service or to the School of Medicine.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions and Scholarship of the School of Medicine, composed of members of the medical faculty and the office of the Registrar. Admission is by recommendation of this committee and with the approval of the Dean of the School.

WHEN TO APPLY FOR ADMISSION

Application for admission in September, 1958, should be made promptly upon completion of the 1956-57 school year (June, 1957). Applications will be considered until the class is filled, but early application is very advantageous.

HOW TO APPLY FOR ADMISSION

Application for admission must be made upon blanks which may be obtained from the Assistant Registrar, Medical Center. An unmounted photograph, 2½ by 3 inches in size, must accompany the completed application when it is submitted to the Assistant Registrar, Medical Center, West Virginia University, Morgantown, W. Va.

CREDENTIALS

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the Assistant Registrar, Medical Center, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Records should include a statement of work in progress. Work subsequently completed should be promptly reported to the Assistant Registrar, Medical Center.

RE-APPLICATIONS

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

HIGH-SCHOOL CREDITS REQUIRED

For admission to the School of Medicine the applicant must be a graduate of an accredited high school.

COLLEGE CREDITS REQUIRED

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which have been approved by appropriate agencies for premedical education.

Applicants from other colleges will receive consideration based upon the merits of the individual case.

Credits submitted by applicants for work done elsewhere than at West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The applicant should present a broad general education including, whenever possible, a major in some field, not necessarily a natural science. The Committee on Admissions needs evidence of excellence of academic performance and steady progress toward a goal. An excess of credit hours or higher degrees does little to offset

the disadvantage of low grades in securing admission to medical schools. The practice of repeating courses to raise the grade is discouraged. Applicants who have been subject to suspension from this or other medical schools can be admitted only in very exceptional cases and at the discretion of the Committee on Admissions and Scholarship.

The requirements outlined below may be met in either of two ways: First and preferably, by pursuing a course of study leading toward a Bachelor's degree with major and minor fields of the applicant's own choosing, or secondly, by following a more rigidly prescribed curriculum generally offered as a "Pre-Medical" curriculum. In either case the applicant must have satisfactorily completed the minimum requirements listed below.

The applicant must present credit from a college of recognized standing for at least 90 semester hours of work exclusive of military science and physical education.

These credits must include the following minimum requirements:

<i>English Composition and Rhetoric</i>	6 hr.
<i>Biological Sciences</i>	12 hr.
Must include 8 hours of General Zoology or 8 hours of General Biology. Comparative Vertebrate Anatomy is desirable, Vertebrate Embryology is suggested.	
<i>Chemistry</i>	16 hr.
Must include inorganic chemistry and organic chemistry (aliphatic and aromatic.)	
<i>Physics</i>	8 hr.
<i>Psychology</i>	3 hr.
Two years of modern foreign language is suggested.	

MEDICAL COLLEGE ADMISSION TEST

The score on this test is used as one criterion of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Tests are announced for May and November of each year. It is of advantage to applicants to take the test in May, inasmuch as many acceptances will be issued before the November scores are available. Students should consult premedical advisers about making application more than a month in advance of the announced dates. Information may also be obtained directly from the Testing Service listed above.

PERSONAL ATTRIBUTES

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Good health is a necessary qualification.

RECOMMENDATIONS

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, one instructor in each of departments of biology, physics, and chemistry to send a letter of recommendation to the Assistant Registrar, Medical Center. A letter from the family physician, clergyman, or some other individual who has known the applicant over a period of years is useful.

NOTIFICATION OF APPLICANTS

All applicants will be informed of the action of the Committee on Admissions and Scholarship as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of those accepted for admission to the School of Medicine.

If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant.

GENERAL RULES OF THE SCHOOL OF MEDICINE

REGISTRATION

All medical students are expected to register at the Medical Center on the days set apart for registration at the beginning of each semester. These dates are given in the University Calendar on page 1.

No student will be permitted to register in the School of Medicine after the first week of classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Committee on Admissions and Scholarship and the professor in charge of the course.

TUITION AND OTHER FEES

All University fees are subject to change without notice.

All fees are due and payable at the Office of the Comptroller, Medical Center, on the days¹ of registration.

	<i>Resident</i> ²	<i>Non-Resident</i>
University Fee (per semester)	\$132.00*	\$350.00*
Total per academic year	\$264.00	\$700.00

Laboratory Fees and Deposits

Microscope Fee (per semester \$15.00)	\$ 30.00	\$ 30.00
Breakage Deposit	10.00	10.00

Special Fees

Late Registration Fee	\$ 2.00	\$ 2.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

<i>Total Required Fees for Academic Year</i>	\$304.00	\$740.00
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<i>Part-Time Students</i> (per semester hour)	8.00	26.00
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Special fee for students not regularly enrolled in the School of Medicine or the the College of Pharmacy, \$4.00 per credit hour in addition to the fee charged in the college or school in which they are registered.

Laboratory fee for University students not regularly enrolled in the School of Medicine, for one laboratory course \$5.00 and for more than one laboratory course \$10.00.

*These fees are required of all full-time students enrolled in the University. "University Fee" includes: Mountainlair Fee—\$2.00; Student Activity Fee—\$7.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

¹Students who have not paid their fees before the close of office hours on the second Saturday following the opening of a semester or a summer term, shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

²No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction or exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover, any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of non-attendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Admissions and Scholarship. (University Rule.)

For medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation of the same academic year.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Committee on Admissions and Scholarship.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

EXAMINATIONS

It is the policy of the various departments of the School of Medicine to conduct examinations from time to time in order that both faculty and students may be kept aware of the individual student's progress. A formal final examination is conducted at the end of each course.

In addition to these departmental examinations, which help serve as a basis for recording grades in various subjects, other examinations may be conducted at times for other purposes. At the end of the first year a comprehensive examination, designed by the entire faculty and intended to serve as a measure of adequacy of curriculum coverage, may be required. It is to be emphasized that this examination will not be used to determine a student's grade in any course or courses.

After the end of the second year, the students may be required to take Part I of the National Board of Medical Examiners Examination, which is usually given in mid-June. Since this is a school requirement, it will be without cost to the student. However, if the student wishes to utilize his score on this examination as part of his performance for certification by the National Board of Medical Examiners, he can arrange to do so by the payment of an additional fee direct to that Board. More complete information may be obtained in the office of the Dean of the School of Medicine.

PROMOTIONS AND SUSPENSIONS

The Committee on Admissions and Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Committee on Admissions and Scholarship.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Committee on Admissions and Scholarship of the School of Medicine. This permission is not valid until it has been reported to the Assistant Registrar, Medical Center for record.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the School of Medicine during the semester should do so in the regular manner. Consult the office of the Assistant Registrar, Medical Center for instructions as to withdrawal.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia as noted on page 7.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

Proficiency in English. The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their work after June 1, 1952. Students who have not previously satisfied this requirement must take this examination in their first semester of registration in the School of Medicine.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. For complete information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements* of the Graduate School.

Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

COURSES OF INSTRUCTION

NOTE—Courses marked "*" are required of first-year students; those marked "+" are required of second-year students.

The following abbreviations are used in designating the semester during which these courses are offered, and also the credit hours of each course:

- I—a course given in the first semester.
- II—a course given in the second semester.
- I, II—a semester course given in each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course offered in the Summer Session.
- hr.—number of credit hours per course.

For convenience each course is designated by the name of the department offering the course and the number of the course. The plan for numbering courses at West Virginia University is as follows:

- Courses 1 to 99—offered primarily for freshmen and sophomores
- Courses 100 to 199—offered primarily for juniors and seniors
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates
- Courses 300 to 399—offered to graduates only

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information, see *Announcements of the Graduate School*.

CURRICULUM REVISION

The curriculum of the School of Medicine is constantly under study by a special committee and by all members of the faculty. In the interests of offering the best possible course of instruction, curriculum revisions are made from time to time.

ANATOMY

Professor CHANDLER; Associate Professor WILLIAMS; Instructors HYDE and BALL

- 201.* GROSS ANATOMY. I. 6 hr. PR: General Zoology. Comparative Anatomy and Embryology desirable. Gross structure of the human body, including pertinent aspects of embryonic development. Lecture, 2 hr. per week; lab. 7 hr.
- 202.* GROSS ANATOMY. II. 5 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 3 hr. per week; lab., 7 hr.
- 203.* NEUROANATOMY. II. 5 hr. PR: Anatomy 201. The gross and microscopic structure of the nervous system with notes on its embryonic development. 3 hr. per week; lab. 6 hr.
- 205.* MICROSCOPIC ANATOMY. I. 6 hr. PR: Zoology 1, 2 or acceptable substitute. The minute anatomy and functional aspects of tissues and organs, with brief reviews of their embryonic development. Lecture, 3 hr. per week; lab., 9 hr.

BACTERIOLOGY AND PUBLIC HYGIENE

Professors SLACK; Assistant Professors HARRELL and ROSS; Lecturer VIGGIANO; Assistant PAVELECH.

- 220. PATHOGENIC BACTERIOLOGY FOR PHARMACY STUDENTS. II, S. 5 hr. PR or Conc.: Chem. 233 (organic chemistry). A detailed study of pathogenic micro-organisms with emphasis on material important to Pharmacy. Lecture, 3 hr. per week; lab., 6 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 221.† MEDICAL BACTERIOLOGY. I. 6 hr. PR or Conc.: Chemistry 233, 238 (Organic Chemistry), Biochemistry 231 desirable. Detailed study of pathogenic micro-organisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of the body to bacterial diseases. Lecture, 3 hr. per week; lab., 9 hr.
- 222.† PUBLIC HYGIENE. II. 2 hr. PR: Consent of instructor. Introduction to the principles of public health. Lecture 2 hr. per week.
- 223. PATHOGENIC BACTERIOLOGY FOR MEDICAL TECHNOLOGY STUDENTS. II, S. 5 hr. PR or Conc.: Chem. 131 (organic chemistry). A detailed study of pathogenic micro-organisms with emphasis on material important to Medical Technology. Lecture, 3 hr. per week; lab., 6 hr. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
- 224. DIAGNOSTIC BACTERIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Bacteriology 221 or equivalent. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
- 226, 227. SPECIAL PROBLEMS IN BACTERIOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent.

320, 321. ADVANCED BACTERIOLOGY. I, II. S. 2-5 hr. per semester. Hours to be arranged. PR: Bacteriology 221 or equivalent. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsiae, and viruses. Graduate students only.

323, 324, 325, 326. RESEARCH IN BACTERIOLOGY. I, II, S. 1-6 hr. per semester. Hours to be arranged. PR: Bacteriology 221, 320 or equivalent.

BIOCHEMISTRY

Professors KRAUSE; Assistant Professors GANGLOFF and LOTSPEICH.

139. GENERAL BIOCHEMISTRY. I. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics. Open to other qualified students.

230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.

231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab. 8 hr.

237, 238. SEMINAR IN BIOCHEMISTRY. I, II. 1 hr. per semester. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.

239. CLINICAL BIOCHEMICAL TECHNIQUES. II. 4 hr. PR: General or Medical Biochemistry. Primarily for students in Medical Technology. Open to other qualified students. Primarily a laboratory course designed to study chemical techniques used in clinical laboratories.

330, 331. BIOCHEMICAL PREPARATIONS. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.

333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

HISTORY OF MEDICINE

Professor CHANDLER

275.† HISTORY OF MEDICINE. I. 1 hr. A brief history of the development of the science and art of medicine. Lecture, 1 hr. per week.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, STARKEY and TAIT; Instructors JOHNSON and HARLEY.

277.* CORRELATION CLINIC. I. 1 hr. Practical demonstrations of the relation of the basic sciences to clinical medicine using the case method. Members of the various basic science departments participate along with the Department of Medicine.

278.* CORRELATION CLINIC. II. 1 hr. A continuation of Medicine 277.

291.† PHYSICAL DIAGNOSIS. I. 2 hr. Lecture and demonstration of the technique of taking clinical histories and performing physical examinations.

292.† PHYSICAL DIAGNOSIS. II. 1 hr. Practical experience in examination of normal and abnormal subjects.

293.† INTRODUCTORY MEDICINE. I. 1 hr. Lectures and demonstrations of patients exhibiting the cardinal manifestations of disease and specific disease entities.

294.† INTRODUCTORY MEDICINE. I. 1 hr. A continuation of Medicine 293.

OBSTETRICS

Professor VAN LIERE

- 291.† OBSTETRICS. II. 2 hr. PR: Anatomy 201, 202 (Human Anatomy), Physiology 242, 243, and Pathology 251. An introductory course in obstetrics. Lecture, 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professor DUNCAN; Instructors EHRCOTT and LOVE.

150. ELEMENTARY HISTOLOGY. I. 3 hr. A study of the elements of histological structure, including blood. Lecture, 2 hr. per week; laboratory 3 hr. Required of students in Medical Technology. Other students as approved by the department.
151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† GENERAL AND TUMOR PATHOLOGY. I. 6 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† SPECIAL PATHOLOGY. II. 3 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week during first half of semester; lecture 2 hr. per week, lab., 2 hr. during second half of semester.
- 254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab., 4 hr. during first half of semester; lecture, 3 hr. per week, lab., 7 hr. during second half of semester.
256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor WATTS; Assistant Professors MCKINNEY and SAXE; Lecturer TUCKER

160. FUNDAMENTALS OF PHARMACOLOGY. I. 5 hr. PR: Physiology 141. For students in the College of Pharmacy. Lecture, 4 hr. per week; laboratory, 3 hr.
- 262.† MEDICAL PHARMACOLOGY. II. 6 hr. PR: Physiology 141 or 242. Origin, chemistry, pharmacodynamics, toxicology, therapeutic use and dosage of drugs commonly used in man and animals with emphasis on the fundamental mechanisms of drug action. Lecture, 5 hr. per week; lab., 6 hr. per week.
266. BIOCHEMORPHOLOGY. II. 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Histology 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.

365. ANESTHESIOLOGY. I, II, S. 3 hr. PR: Physiology 243. Production of surgical anesthesia in man and animals. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTIUP and VAN LIERE; Associate Professor STICKNEY; Assistant Professor LINDSAY

141. ELEMENTARY PHYSIOLOGY. I. 4 hr. PR: Biology 1, 2 or Zoology 1, 2; PR or concurrent: Chemistry 131 (Organic Chemistry). For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr. per week.
- 241.* PHYSIOLOGY. II. 9 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology for Medical Students. Lecture, 7 hr. per week; laboratory, 8 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 242 or 243.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 242 and 243, Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in the physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructor M. PRIDE; in cooperation with members of the Department of Anatomy.

- 281.† PRINCIPLES OF SURGERY AND SURGICAL ANATOMY. II. 2 hr. Lecture and demonstration of the importance of Anatomy to clinical surgery.
- 228.† PRINCIPLES OF SURGERY. I. 1 hr. Demonstration of clinical cases and operative techniques.

II. Curriculum in Medical Technology

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), *Chairman*
 R. F. KRAUSE (Professor of Biochemistry)
 W. K. HARRELL (Assistant Professor of Bacteriology)
 E. J. VAN LIERE (Dean of the School of Medicine)

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as technicians in hospitals, clinics, research laboratories, and in offices of private physicians.

Training standards for laboratory technicians are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association. This Council inspects, evaluates, and approves schools. This school is included in the list of those approved by the American Medical Association. Properly qualified graduates, upon passing the required examinations, may be certified by the Board of Registry of Medical Technologists of the American Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, requires two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser. A total of four years is required for the degree.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

REQUIREMENTS FOR ADMISSION

For admission to the curriculum in Medical Technology, the applicant must have graduated from high school and present at least 15 units of high school work acceptable to the University. In addition, one unit of plane geometry is desirable.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 hours, exclusive of military science, as specified below:

English. 12 semester hours. (Must include 6 hours composition and rhetoric and 6 additional hours in literature.)

Modern Foreign Language. 12 hours.

Biological Science. 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry. 16 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 4 hours; Organic Chemistry, 4 hours.)

Physics. 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Students should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry or comparative anatomy.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms which may be obtained from the Assistant Registrar, Medical Center. Application should be made in February of the second pre-technology year. When applying, unless he is in residence at West Virginia University, the student should request the registrar of his college to send an official transcript of his work to the

Assistant Registrar, Medical Center.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the School of Medicine. Notification will be sent after April 1.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in selecting students. Applicants from institutions other than West Virginia University should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

TUITION AND OTHER FEES

All University fees are subject to change without notice. Students in Medical Technology pay the following fees in their junior and senior years. All fees are due and payable at the Office of the Comptroller, Medical Center, on the days of registration.³

Tuition Fees

	<i>Resident⁴</i>	<i>Non-Resident</i>
University Fee (per semester)	\$ 70.00*	\$245.00*
Total per academic year	140.00	490.00
Summer (per semester hour)	4.00	8.00

Laboratory Fees and Deposits

Microscope Fee (per semester \$15.00)	\$ 30.00	\$ 30.00
Breakage Deposit	10.00	10.00

Special Fees

Late Registration Fee	\$ 2.00	2.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

<i>Total Required Fees Per Academic Year</i>	<i>\$180.00</i>	<i>\$530.00</i>
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Special fees for students not enrolled in the School of Medicine or the College of Pharmacy, \$4.00 per credit hour in addition to the fee charged in the college or school in which they are registered.

Laboratory fee for students not regularly enrolled in the School of Medicine, for one laboratory course, \$5.00 and for more than one laboratory course, \$10.00.

*These fees are required of all students enrolled in the University. "University Fee" includes: Mountainlair Fee—\$2.00; Student Activity Fee—\$7.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

³Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester or a summer term, shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non resident student may establish domicile in this State, entitling him to reductions or exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover, any student who has originally paid nonresident fees may be entitled to pay resident fees, if after an interim of non-attendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year. The grade-point average for the third year must be at least 1.5 per registration hour.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During the first year of enrollment in the School of Medicine students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Semester</i>	<i>Hr.</i>	<i>Second Semester</i>	<i>Hr.</i>
Comparative Anatomy 231	5	Parasitology 255	4
Pathology 150	3	Bacteriology 223	5
Biochemistry 139	4	Biochemistry 239	4
Physiology 141	4	Pathology 151	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygienic Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.

108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

III. General University Information

ADMISSION REQUIREMENTS

Candidates for admission to the University must be at least sixteen years of age. They may be admitted either by examination or on the basis of official transcripts of record. Transcripts of secondary school record must be sent by the principal directly to the Registrar of the University immediately after the student's graduation;¹ transcripts of college or university record must be sent by the registrar of the other institution directly to the Registrar of the University immediately after the student has completed his work in that institution. Transcripts should be received by the Registrar of the University at least three weeks prior to the beginning of the term or semester in which the applicant is interested. The transcripts received in support of applications for admission become the property of the University and are permanently filed in the office of the Registrar.

Applicants for admission who do not have transcripts showing graduation from accredited secondary schools on file in the office of the Registrar of the University or who do not have official transcripts from colleges or universities previously attended on file in the office of the Registrar of the University, may, at the discretion of the Committee on Admissions, be permitted to register provisionally. If satisfactory transcripts cannot be obtained, the registration will be cancelled and the fees paid by the applicant will be returned, in accordance with the University refund schedule. A provisional registration will not be continued for a period longer than one week.

Conditional Admission. Students must make up all deficiencies before they can be classified as sophomores.

SPECIAL STUDENTS

Mature students, offering at least nine units of the requirements for admission, including two units of English, may, upon written application to the Committee on Admissions, be permitted to register as special students. Special students must make up all deficiencies before they can be classified as sophomores.

ENTRANCE UNITS

A unit in any subject represents the amount of work that may be done in a standard high school year of thirty-six weeks, with five recitation periods per week, of no less than forty minutes each. In courses where laboratory work is required, from two to three periods of laboratory work are considered the equivalent of one period of recitation according to the amount of outside preparation required in connection with such work.

For admission to West Virginia University the student must have graduated from high school and present 15 units of high school work acceptable to the University.

A. The following groups are required:

1. Four units of English.²
2. Three units in a second subject.
3. Two units in each of two other subjects.
4. One unit of plane geometry is required of premedical and predental students and of students who intend to select chemistry, geology, mathematics, or physics as their major subject.

Either the three-unit subject or one of the two-unit subjects must include one unit of algebra.

B. Work in the following subjects not to exceed the number of units placed after each subject will be accepted.

¹In accrediting West Virginia secondary schools the University follows the classification made by the State Department of Education.

²A student may enter the University with 3 units of English and satisfy admission requirements by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition, or English 1, Composition and Rhetoric.

<i>Subject</i>	<i>Units</i>	<i>Subject</i>	<i>Units</i>
English ²	4	Science ⁵	
Journalism	1	Biology ⁶	1
Speech	1	Botany ⁶	1
Foreign languages ³		Chemistry	1
French	3	General Science	1
German	3	Geology	1
Greek	3	Physical Geography	1
Italian	3	Physics	1
Latin	4	Physiology	1/2
Spanish	3	Zoology ⁶	1
Education	2	Commercial geography	1/2
Mathematics		Commercial law	1/2
General	1	Vocational subjects (not to	
Algebra	2	exceed 5 units)	
Plane geometry	1	Agriculture	4
Solid geometry	1/2	Home Economics	3
Trigonometry	1/2	Industrial training	3
History and Social Science ⁴		Bookkeeping, or bookkeeping	
History	3	and commercial arithmetic	2
Social Science	3	Commercial arithmetic (alone) ..	1/2
Drawing		Shorthand	2
Free-hand drawing	1	Typing	1
Mechanical drawing	1	Aeronautics	1
Music	2	Art	1
		Hygiene	1
		Physical education	1

CREDIT ACCEPTED FROM A JUNIOR COLLEGE

The maximum credit accepted from a junior college accredited by the North Central Association of Colleges and Secondary Schools or other regional accrediting association will not exceed seventy-two (72) semester hours, and credit will be allowed for lower division courses only. No credit will be allowed for courses completed in a junior college subsequent to attainment of junior or higher rank by the student at the University.

ADVANCED STANDING EXAMINATION

Application for advanced standing on work of college grade for which college credit cannot be established on the basis of official transcript of record, should be made to the Registrar of the University not later than two weeks after the applicant's matriculation. Upon payment of the proper fee the Registrar will issue an examination permit. After examination, the department will report to the Registrar the University course, if any, for which the applicant is entitled to credit.

REGISTRATION

Persons who are not registered as students in the University or who are not members of its administrative or teaching staffs shall not be admitted to regular attendance in University classes.

All students are expected to register on the days set apart for registration at the beginning of each semester or term of the University. All freshmen are required to take intelligence, placement, medical, and physical tests.

Immediately after completion of their registration, all students are expected to pay their fees at the Office of the Comptroller, or Medical Center, or at the Comptroller's desk in the Field House, depending on the place of registration.

²See Footnote 2, page 23.

³One unit of Latin will be accepted. No less than 2 units of either French, German, Greek, Italian, or Spanish will be accepted unless sufficient additional work in that language is taken in college to complete a minimum of 2 units.

⁴A group of 3 units may be formed combining 2 units of history with 1 unit of social science or 2 units of social science with 1 unit of history.

⁵A group of 2 or 3 units in science may be made by combining one unit each of any 2 or 3 of the following: biology, botany, chemistry, geology, physics, and zoology.

⁶If a student presents one unit of biology for admission, he may have credit for no more than 1/2 unit in either botany or zoology.

WITHDRAWAL FROM THE UNIVERSITY

A student who desires to withdraw from the University must obtain a withdrawal card from the office of the Registrar. Withdrawal procedure will be explained to him when he obtains the card.

Students who withdraw from the University without permission will receive at the end of the semester or term a grade of "F" (failure) in each of the subjects for which they are registered and will be indefinitely suspended from the University.

Students who desire to drop part of their work may withdraw from classes in which they are enrolled with a grade of "W" at any time prior to the end of the second week following the date set for midsemester reports. Withdrawal permit must be approved by the adviser and filed with the Registrar. If such withdrawal reduces the student's hours below the required minimum, the permit must be approved by the Scholarship Committee. Withdrawals after the above date will be permitted only in exceptional cases and must be approved by the Scholarship committee of the college in which the student is registered.

CAMPUS PARKING REGULATIONS

Students are required to observe all rules and regulations of the University with respect to the parking of motor vehicles on the campus.

ENGLISH PROFICIENCY EXAMINATION

Each undergraduate who begins college work after June 1, 1952, must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take the examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary. The examination shall be administered by the English Proficiency Board.

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

A—excellent—given only to students of superior ability and attainment

B—good—given to those students who are well above average but who are not in the highest group

C—fair—average students

D—poor but passing

I—incomplete

F—failure

W—all withdrawals prior to end of second week following date for mid-semester reports

WP—withdrew passing

WF—withdrew failing

X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF"—0. When the grade of "I" becomes converted into a grade carrying credit the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination,

including blood tests, urinalysis, and X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes four physicians, seven nurses, and two laboratory technicians. The Departments of Pathology and Bacteriology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to the University Pharmacy. On the second floor is the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients. On the second floor, rooms also are occupied by the Department of Pathology of the School of Medicine. These include a student laboratory, pathological museum, preparation room, stock room and necessary offices and individual laboratories.

The third floor of the Health Center is equipped with about 20 beds and operates as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

MEDICAL STUDENTS 1956-57

FIRST YEAR STUDENTS (ENTERED SEPTEMBER 1956)

Anderson, Carl Leslie (A.B., West Virginia University, 1956)	Glen Dale
Ashworth, Charles Vincent, Jr. (A.B., West Virginia University, 1956)	Moundsville
Boscka, David Anderson	Morgantown
Bragg, Arthur Dane (B.S., Virginia Polytechnic Institute, 1952)	Gilbert
Conley, William Gustavus, III (A.B., West Virginia University, 1956)	Charleston
Drasnin, Donald (A.B., Northwestern University, 1955)	Charleston
Fisher, Gilbert Franklin, Jr.	Huntington
Gemma, Frank Eugene (A.B., West Virginia University, 1956)	Clarksburg
Ghaphery, James Louis (A.B., West Virginia University, 1956)	Wheeling
Gibson, Stephen Kermit (A.B., University of North Carolina, 1956)	Nitro
Gilliland, Robert Lee (B.S., George Peabody College, 1955)	Belle
Harman, Janet Rosalee (B.S., West Virginia University, 1952)	Harman
Hatfield, Kenneth Byron (B.S., University of Kentucky, 1955)	Charleston
Howes, Thomas Martin	Charleston
Hughes, James Thomas (B.S., Pharm., West Virginia University, 1955)	Spencer
Kelley, David Leroy (A.B., West Virginia University, 1956)	Moundsville
Kopinski, Joseph Clemens (A.B., West Virginia University, 1956)	Scarbrough
McKown, Charles Henry, Jr. (A.B., West Virginia University, 1956)	Wayne
McWhorter, William David	Clarksburg
Martino, Robert S. (A.B., West Virginia University, 1953)	Clarksburg
Murphy, Eugent Leo (A.B., West Virginia University, 1956)	Clarksburg
O'Connor, Robert Darrell (A.B., West Virginia University, 1956)	Charleston
Pitsenberger, John David	Huntington
Russell, Donald Eugene (A.B., West Virginia University, 1954)	Morgantown
Schwab, Lowell Wayne (A.B., West Virginia University, 1956)	Kingwood
Stovall, Richard Lee (B.S., Concord College, 1955)	Princeton
Straney, Charles Nicholas (B.S., Duquesne University, 1951)	Weirton
Whittaker, William B.	Dunbar
Wickham, James Robert (A.B., West Virginia University, 1956)	Grafton
Wiley, Conrad Walton (A.B., West Virginia University, 1956)	Princeton
Wolfe, Walter Woods, Jr.	Parkersburg

SECOND YEAR STUDENTS (ENTERED SEPTEMBER 1955)

Antalis, James Peter (A.B., West Virginia University, 1955)	Weirton
Appling, John Morgan (B.A., Emory and Henry College, 1955)	Bluefield
Ball, Gene Virgil (B.S., Fairmont State College, 1952)	Fairmont
Bekenstein, William Leon (A.B., West Virginia University, 1951)	Charleston
Brasuk, Virginia May (A.B., West Virginia University, 1956)	Grant Town
Coyner, John Ligon	Marlinton
Critchley, William Frederick, Jr. (A.B., West Virginia University, 1956)	Clarksburg
Fearnow, Ronald Grayson	Charles Town
Gainer, James Vincent, Jr.	Tunnelton
Ghaphery, Alfred David (B.S., University of Notre Dame, 1955)	Wheeling
Gillespy, William Greene	Huntington
Harris, Robert Miller (A.B., Johns Hopkins University, 1955)	Lewisburg
Jones, William Reynolds	Nitro
Kendall, Juneus Frederick	South Charleston
Leadbetter, Robert Lewin (A.B., West Virginia University, 1955)	Morgantown
Mangus, Jimmie Lee (B.S., Pharm., West Virginia University, 1954)	South Charleston
Neale, Richard Carroll, Jr.	Princeton
Power, Mary Ann (A.B., West Virginia University, 1955)	Martinsburg
Powers, James Edward	Bluefield
Sloan, Alexander Maxwell (B.S., University of Maryland, 1955)	Clarksburg
Staats, Okey James (B.A., University of Virginia, 1955)	Huntington
Traugh, George Holton, Jr. (A.B., West Virginia University, 1955)	Fairmont
Weiler, Robert Richards (A.B., Harvard University, 1955)	Wheeling
Wells, Hawey Adolphus, Jr.	Athens

Williams, Lawrence Alden (A.B., West Virginia University, 1956)	Morgantown
Woodrum, Anne Johnson (A.B., West Virginia University, 1955)	Cedar Grove
Znoy, Joseph Marion	Weirton

STUDENTS IN MEDICAL TECHNOLOGY

JUNIOR YEAR

Forinash, Carolyn Jean	Huttonsville
Lawson, Anne Cornelia	Grafton
Lantz, Patricia Ann	Wheeling
Levine, Shirley Ruth	Morgantown
O'Kelly, Molly Elizabeth	Parkersburg
Petracca, Thelma Rose	Fairmont
Schoppert, Betty Sue	Westernport, Maryland
Tucker, Constance Carole	Independence
Wilbourn, Mary Elizabeth	Clarksburg

SENIOR YEAR

Blair, Mary Elizabeth	Parkersburg
Caussin, Janet Lee	Clarksburg
Gregory, Carol Jean	Nutterfort
Gregory, Nancy	Morgantown
Hamilton, Jane Dagmar	Clarksburg
Morgan, Doris Anne	Oceana
Swope, Joan Virbell	Morgantown
Vannoy, Phyllis Iline	Morgantown
Wardle, Suzanne	Morgantown
Witt, Peggy Jean	Fairmont
Zinn, Nancy Jean	Buckhannon







SCHEDULE OF COURSES FOR 1957-58

Course	Hr. Per Week			Hr. Per Semester			Semester Credit Hours
	Lect.	Lab.	Total	Lect.	Lab.	Total	
First Year—First Semester							
Gross Anatomy 201	2	7	9	32	112	144	6
Microscopic Anatomy 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	8	12	64	128	192	7
Correlation Clinic 277	1	0	1	16	0	16	1
First Year—Second Semester							
Gross Anatomy 202	3	7	10	48	112	160	5
Neuroanatomy 203	3	6	9	48	96	144	5
Physiology 241	7	8	15	112	128	240	9
Correlation Clinic 278	1	0	1	16	0	16	1
Second Year—First Semester							
Medical Bacteriology 221	3	9	12	48	144	192	6
General and Tumor Pathology 251	4	10	14	64	160	224	6
Physical Diagnosis 291	1	1	2	16	16	32	1
Introductory Medicine 293	1	1	2	16	16	32	1
History of Medicine 275	1	0	1	16	0	16	1
Principles of Surgery 282	0	2	2	0	32	32	1
Second Year—Second Semester							
Public Hygiene 222	2	0	2	32	0	32	2
Special Pathology 252	2	2	4	32	32	64	3
Clinical Pathology 254	3	7	10	48	112	160	3
Medical Pharmacology 262	5	6	11	80	96	176	6
Physical Diagnosis 292	0	2	2	0	32	32	1
Introductory Medicine 294	1	1	2	16	16	32	1
Principles of Surgery and Surgical Anatomy 281	1	1	2	16	16	32	2
Introduction to Obstetrics 291	2	0	2	32	0	32	2

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Biochemistry						Anatomy (1:30 to 4:30)			
T	Anatomy						Anatomy (1:30 to 4:30)			
W	Biochemistry						Anatomy (1:30 to 4:30)			
Th	Anatomy						Anatomy (1:30 to 4:30)			
F	Biochemistry						Anatomy Medicine (1:30 to 2:30)			

(2:30 to 3:30)

FIRST YEAR—SECOND SEMESTER

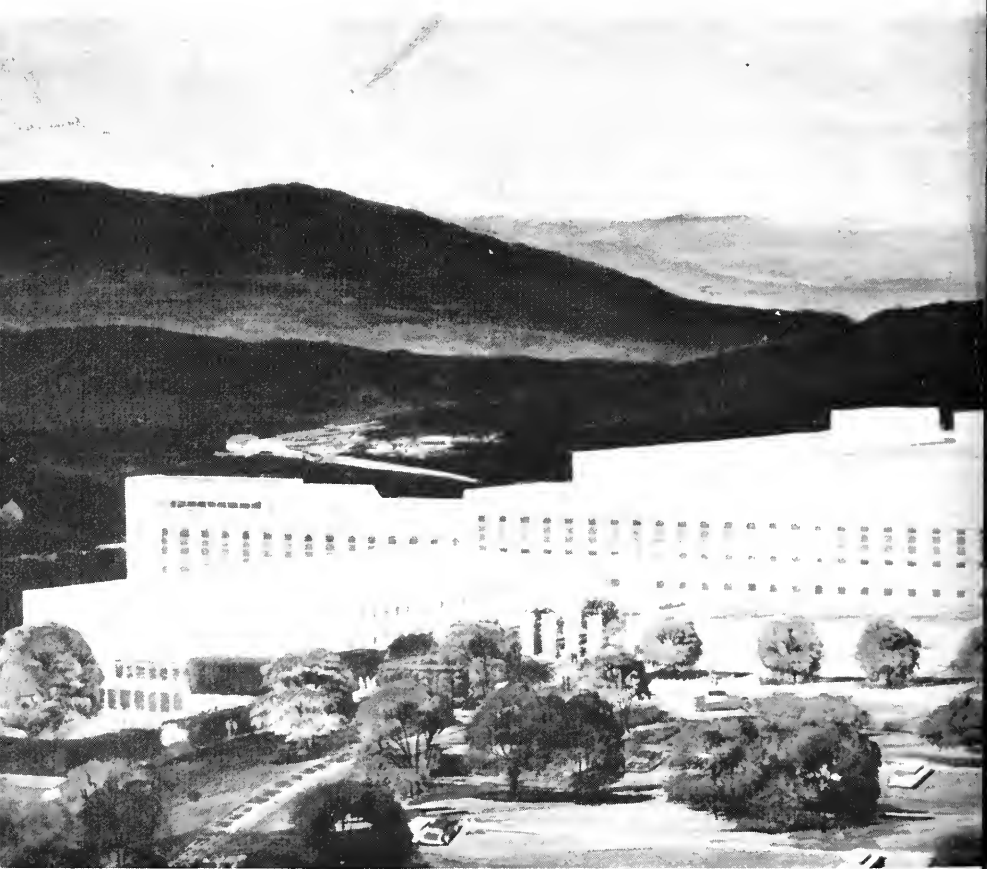
	8	9	10	11	12	1	2	3	4	5
M	Physiol Anatomy						Physiol	Anatomy	Medicine	
T	Physiology						Physiol	Anatomy		
W	Anatomy						(Free Time)			
Th	Physiology						Physiol	Anatomy		
F	Anatomy						Physiology			

SECOND YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Medicine		P. Diag.	Surgery			Pathology			
T	Bacteriology						Pathology			
W	(Free)	H.Med.	P. Diag.	Surgery			(Free Time)			
Th	Bacteriology						Pathology			
F	Bacteriology						Pathology			

SECOND YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Surgery		Obstet.	Pharm.		Pathology		Medicine		
T	Pharmacology					Pathology				
W	Hygiene		Pharmacology				(Free Time)			
Th	Medicine		Pathology				Pathology		Parasitol	
F	Phys. Diag.		Obstet.	Pharm.		Pharmacology				





WEST VIRGINIA UNIVERSITY

The School of MEDICINE



WEST VIRGINIA UNIVERSITY BULLETIN

ANNOUNCEMENTS—1958-59 SESSION

YEAR 1958

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8	6	7	8	9	10	11	12
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22	20	21	22	23	24	25	26
26	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29	27	28	29	30			
														30	31												

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
							1	2	3	4	5	6	7														
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
25	26	27	28	29	30	31	29	30						27	28	29	30	31			24	25	26	27	28	29	30
																					31						

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15	11	12	13	14	15	16	17
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27
28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31			
														30													

YEAR 1959

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	5	6	7	8	9	10	1	2	3	4	5	6	7	1	2	3	4	5	6	7	5	6	7	8	9	10	11
11	12	13	14	15	16	17	8	9	10	11	12	13	14	8	9	10	11	12	13	14	12	13	14	15	16	17	18
18	19	20	21	22	23	24	15	16	17	18	19	20	21	15	16	17	18	19	20	21	19	20	21	22	23	24	25
25	26	27	28	29	30	31	22	23	24	25	26	27	28	22	23	24	25	26	27	28	26	27	28	29	30		
														29	30	31											

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
31																					30	31					

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
6	7	8	9	10	11	12	4	5	6	7	8	9	10	1	2	3	4	5	6	7	6	7	8	9	10	11	12
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
27	28	29	30				25	26	27	28	29	30	31	29	30						27	28	29	30	31		

The days on which the University is in session are printed in light-face type; Sundays, holidays, and vacations in bold face type.

ON THE COVER

Pylons at the entrance of the West Virginia University Medical Center.

UNIVERSITY CALENDAR

1958

June 1, Sunday	Baccalaureate Exercises
June 2, Monday	Commencement
June 4, Wednesday	Registration, First Term, Summer Session
June 5, Thursday	First Classes, First Term, Summer Session†
July 4, Friday	Independence Day, a holiday
July 16, Wednesday	Close of First Term, Summer Session
July 17, Thursday	Registration for Second Term, Summer Session
July 18, Friday	First Classes, Second Term, Summer Session†
August 27, Wednesday	Close of Second Term, Summer Session
September 8, Monday, to September 14, Sunday, inclusive ..	Freshman Week Program
September 12, Friday, and September 13, Saturday	General Registration for First Semester
September 15, Monday	First Classes, First Semester
October 9, Thursday	English Proficiency Examination
October 14, Tuesday	Meeting of University Senate
November 3, Monday	Mid-Semester Reports Due
November 4, Tuesday	Election Day, a holiday
November 26, 12:00 noon Wednesday, to November 30, Sunday, inclusive ..	Thanksgiving Recess
December 20, 12:00 noon Saturday, to January 4, Sunday, inclusive ..	Christmas Recess

1959

January 16, Friday, to January 22, Thursday, inclusive	Final Examinations for First Semester
January 28, Wednesday, and January 29, Thursday	General Registration for Second Semester
January 30, Friday	First Classes, Second Semester
February 7, Saturday	West Virginia University Day
February 10, Tuesday	Meeting of University Senate
February 26, Thursday	English Proficiency Examination
March 23, Monday	Mid-Semester Reports Due
March 26, Thursday, to April 1, Wednesday, inclusive	Easter Recess
May 12, Tuesday	Meeting of University Senate
May 21, Thursday	Last Classes, Second Semester
May 23, Saturday, to May 29, Friday, inclusive	Final Examinations for Second Semester
May 30, Saturday	Alumni Day
May 31, Sunday	Baccalaureate Exercises
June 1, Monday	Commencement
June 8, Monday	Registration, First Term, Summer Session
June 9, Tuesday	First Classes, First Term, Summer Session
July 4, Saturday	Independence Day, a holiday
July 17, Friday	Close of First Term, Summer Session
July 20, Monday	Registration, Second Term, Summer Session*
July 21, Tuesday	First Classes, Second Term, Summer Session
August 26, Wednesday	Close of Second Term, Summer Session
September 9, Wednesday, to September 15, Tuesday, inclusive ..	Freshman Week Program
September 14, Monday, and September 15, Tuesday	General Registration for First Semester
September 16, Wednesday	First Classes, First Semester
October 8, Thursday	English Proficiency Examination
October 13, Tuesday	Meeting of University Senate
November 2, Monday	Mid-Semester Reports Due
November 25, Wednesday, to November 29, Sunday, inclusive ...	Thanksgiving Recess
December 19, Saturday noon, to January 3, Sunday, inclusive	Christmas Recess

*Classes will be held on August 1 and 15.
†Classes will be held on June 28 and August 9.

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WEST VIRGINIA UNIVERSITY

ESTABLISHED FEBRUARY 7, 1867

MORGANTOWN

The Board of Governors

	TERM EXPIRES
A. C. SPURR, <i>President</i> , Wheeling	1961
E. G. OTEY, <i>Vice-President</i> , Bluefield	1959
K. DOUGLAS BOWERS, <i>Secretary</i> , Beckley	1962
MRS. PAUL HAMMANN, Martinsburg	1958
THOMAS L. HARRIS, Parkersburg	1960
FRANK J. ZSOLDOS, Pineville	1963
WILLIAM G. THOMPSON, Montgomery	1964
RAYMOND E. SALVATI, Huntington	1965
FORREST H. KIRKPATRICK, Wheeling	1966
IRVIN STEWART, <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State College of West Virginia University.

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Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

- IRVIN STEWART, LL.B., A.B., A.M., PH.D., LL.D., *President of the University*
BETTY BOYD, A.B., *Dean of Women*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENER, B.A., *Comptroller*
J. EVERETT LONG, A.B., M.A., *Registrar of the University and Chairman of the University Committee on Admissions*
ROBERT FERGUSON MUNN, M.A., *University Librarian*
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ALDERSON FRANCIS FRY, A.B., B.L.S., A.M., LL.B., *Medical Center Librarian*
HOWARD OLIVER CROASMUN, B.S., *Financial Secretary, Medical Center*
LYLE E. HEROD, A.B., M.S., *Assistant Registrar, Medical Center*

THE FACULTY

PROFESSORS

- EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920; PH.D., University of Chicago, 1927; LITT.D., Medical College of Virginia, 1948; F.A.C.P.
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
B.A., M.A., University of Colorado, 1904, 1905; PH.D., University of Pennsylvania, 1910.
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*
B.S., Purdue University, 1914; M.S., Pennsylvania State College, 1913; PH.D., University of Chicago, 1923.
SIMON B. CHANDLER, *Professor Emeritus of Gross Anatomy and Neuroanatomy*
A.B., University of Missouri, 1922; A.M., M.D., Northwestern University, 1926, 1927.
MILFORD LEROY HOBBS, *Professor of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow American College of Physicians, Fellow College of American Pathologists; Diplomate, American Board of Pathology.
DAVID WILMARTH NORTHUP, *Professor of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; PH.D., University of Illinois, 1935.
JOHN MADISON SLACK, *Professor of Microbiology and Public Hygiene*
A.B., M.S., PH.D., University of Minnesota, 1936, 1937, 1940.
REGINALD FREDERICK KRAUSE, *Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; PH.D., University of Rochester, 1942; M.D., University of Vermont, 1951.
DANIEL THOMAS WATTS, *Professor of Pharmacology*
A.B., Elon College, 1937; PH.D., Duke University, 1942.
THOMAS WALLEY WILLIAMS, *Professor of Microscopic Anatomy and Organology*
B.S., M.S., PH.D., University of Pittsburgh, 1934, 1937, 1939.
JOHN CLIFFORD STICKNEY, *Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; PH.D., University of Minnesota, 1940.
ROBERT JOSEPH JOHNSON, *Professor of Gross and Neurological Anatomy*
M.D., University of Iowa, 1943.

ASSOCIATE PROFESSORS

- CECIL BENJAMIN PRIDE,* *Associate Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.

*Part time. In private practice.

- JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
- CLARK KENDALL SLEETH, *Associate Professor of Medicine, Assistant Director of University Health Service and Chairman of Committee on Admissions and Scholarship*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
- GORDON R. MCKINNEY, *Associate Professor of Pharmacology*
A.B., DePauw University, 1946; M.S., University of Notre Dame, 1948; Ph.D., Duke University, 1951.
- CHARLES CHESTER BOYER, *Associate Professor of Gross and Neurologic Anatomy*
B.S., St. Bonaventure, 1938; M.A., Ph.D., Duke University, 1940, 1948.
- RANDALL WILLIAM REYER, *Associate Professor of Microscopic Anatomy and Organology*
A.B., M.A., Cornell University, 1939, 1942; Ph.D., Yale University, 1947.
- A. CURTIS HIGGABOTHAM, *Associate Professor of Microscopic Anatomy and Organology*
B.S., Ph.D., Northwestern University, 1935, 1939.

ASSISTANT PROFESSORS

- GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.
- FREDERICK RENDELL WHITLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.
- ARCHIE LEMUEL STARKEY,* *Assistant Professor of Medicine (Physical Diagnosis), (Superintendent of Hopemont Sanitarium)*
B.S., West Virginia University, 1924; M.D., University of Arkansas, 1937.
- WILLIAM KNOX HARRELL, *Assistant Professor of Bacteriology*
B.S., University of Arkansas, 1947; M.S., University of Oklahoma, 1949; Ph.D., University of Michigan, 1954.
- EDWIN CHARLES GANGLOFF, *Assistant Professor of Biochemistry*
B.A., M.S., Ohio State University, 1945, 1947; Ph.D., Wayne University, 1955.
- LEROY HALLOWELL SAXE, *Assistant Professor of Pharmacology*
B.S., Shippensburg (Pa.) State Teachers College, 1938; A.M., Ph.D., University of Pennsylvania, 1940, 1951.
- HUGH ALEXANDER LINDSAY, *Assistant Professor of Physiology*
B.Sc., M.Sc., University of Western Ontario, 1949, 1952; Ph.D., University of Toronto, 1955.
- FREDERICK JACKSON LOTSPEICH, *Assistant Professor of Biochemistry*
B.S., M.S., West Virginia University, 1948, 1952; Ph.D., Purdue University, 1955.
- MARTIN RUSSELL ROSS, *Assistant Professor of Microbiology*
B.A., University of Connecticut, 1950; M.S., University of Michigan, 1952; Ph.D., George Washington University, 1956.
- BETHOLENE FRANCES LOVE, *Assistant Professor of Pathology*
B.S., Western Reserve University, 1946; M.S., Oklahoma University, 1950.
- JOHN BARKER HARLEY, *Assistant Professor of Pathology and Instructor in Medicine*
B.S., Dickinson College, 1943; M.D., University of Maryland, 1946.

INSTRUCTORS

- CARL EDWARD JOHNSON,* *Instructor in Medicine*
A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.
- MAYNARD PRIDE,* *Instructor in Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve, 1939.
- WILLIAM AUGUST EHRCOTT,* *Instructor in Pathology*
B.S., Lebanon Valley College 1933; M.D., Jefferson Medical College, 1942.
- EDGAR FRANK HEISKELL, JR.,* *Instructor in Surgery*
A.B., B.S., West Virginia University, 1938, 1940; M.D., Northwestern University, 1943.
- DARIS RAY SWINDLER, *Instructor in Gross and Neurologic Anatomy*
A.B., West Virginia University, 1950; M.A., University of Pennsylvania, 1952.

*Part time. In private practice.

- WILLIAM RUSSELL GOODGE, *Instructor in Gross and Neurologic Anatomy*
B.S., PH.D., University of Washington, 1949, 1957; M.A., University of Michigan, 1950.
- CONSTANTINE HARRY TEMPELIS, *Instructor in Microbiology*
B.S., Wisconsin State College, 1950; M.S., PH.D., University of Wisconsin, 1953, 1955.
- WILLIAM JAMES CANADY, *Instructor in Biochemistry*
B.S., Fordham University, 1946; M.S., PH.D., George Washington University, 1950, 1955.

ASSISTANTS

- HELEN MARY PAVLECH, *Assistant in Microbiology*
B.S., M.A., West Virginia University, 1938, 1950.
- DANE WOOD MOORE, JR., *Research Assistant in Microbiology*
B.S., Alderson Broadbush College, 1950; M.S., West Virginia University, 1957.
- RICHARD HERBERT BISHOP, *Bacteriologist*
B.S., Hillsdale College, 1953.
- ELIZABETH LOUISE ARNETT, *Research Assistant in Pharmacology*
A.B., West Virginia University, 1957.
- JEAN JOHNSON RAMEY, *Research Assistant in Pharmacology*
- FRANCES HEFFRIN HIGGINBOTHAM, *Research Assistant in Microscopic Anatomy and Organology*
- DONNA LENORA MARTINO, *Research Assistant in Microbiology*
B.S., West Virginia University, 1952.
- ROBERT KIRKWOOD HAMILTON, *Research Assistant in Microbiology*
B.S., Fairmont State College, 1953; M.S., West Virginia University, 1957.
- ROBERT LEE BOWMAN, *Research Assistant in Microbiology*
B.S. Marshall College, 1957.
- CECIL H. MIRACLE, *Research Assistant in Microbiology*
B.S., Marshall College, 1956.
- ROBERT MARTIN RICHARDSON, *Research Assistant in Microbiology*
B.S., Marshall College, 1957.

LECTURERS

- ELDON BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.
- MICHAEL ANTHONY VIGGIANO,* *Lecturer in Public Hygiene*
B.S., A.M., West Virginia University, 1932, 1934; M.D., Rush Medical School, 1937; M.P.H., Johns Hopkins University, 1942.

TECHNICIANS

- FABRY LIVINGSTONE HAWK, *Assistant Director of Student Health Laboratory*
- WILLIS G. LEMLEY, *Laboratory Technician in Anatomy*
A.B., West Virginia University, 1942.
- OLGA D. SUFRITZ, *Technician in Microbiology*
B.A., Temple University, 1945.
- LOIS JOANNE KINLEY, *Technician in Biochemistry*
B.S., West Virginia University, 1956.
- ANNE WAGONER SHARPE, *Technician in Pathology*
B.S., West Virginia University, 1956.
- THOMAS BALTZER MCBEE, *Technician in Pharmacology*
- THODORE LUCIAN BROWNE, *Technician in Physiology*
B. S., Hampton Institute, 1952.
- CHARLES KAY PAYNE, *Technician in Biochemistry*

CLERICAL PERSONNEL

- MILDRED F. FISHER, *Secretary to the Dean*
- MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946.
- ELSIE MAE DINSMORE, *Secretary in Biochemistry and Pharmacology*

*Part time. In private practice.

MILDRED SHORTRIDGE CLARK, *Reference Librarian, Medical Center Library*
A.B., M.S., West Virginia University, 1941.
BLANCHE HARMISEN KUYKENDALL, *Circulation Librarian*
R.N., Philadelphia, 1935.
JACQUELINE K. PONCEROFF, *Secretary in Gross and Neurologic Anatomy and in Microscopic Anatomy and Organology*
EVELYN MCCLURE DUNCIL, *Secretary in Microbiology*
MYRTLE LOU LANTZ, *Secretary to the Assistant Registrar, Medical Center*
MARY ELIZABETH BOWLBY, *Secretary in Medicine and Surgery*

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
CLARK KENDALL SLEETH, *Assistant Director of University Health Service and Associate Professor of Medicine*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
HUBERT ADAMS SHAFFER,* *Consulting Radiologist*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
EDGAR FRANK HEISKELL, JR.,* *Assistant Physician and Instructor in Surgery*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University Medical School, 1943.
REGINALD FREDERICK KRAUSE, *Physician (part time) and Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., University of Rochester, 1942; M.D., University of Vermont, 1951.
JAMES THOMAS HICKS, *Physician, University Health Service*
A.B., B.S., M.S., University of Pittsburgh, 1945, 1946, 1946; Ph.D., George Washington University, 1950; M.D., University of Arkansas, 1956.
WILLIAM JOHN HESEN, *Physician, University Health Service*
A.B., B.S., West Virginia University, 1933, 1948; M.D., Medical College of Virginia, 1950.
BENJAMIN MORTIMER STOUT, JR.,* *Physician, University Health Service*
A.B., West Virginia University, 1948; M.D., Jefferson Medical College, 1952.
CHARLES HARMON BOGGS, JR.* *Physician, University Health Service*
A.B., B.S., West Virginia University, 1948, 1949; M.D., Northwestern University, 1950.

NURSES

HELEN LOUISE KUDLA, R.N.
MARGARET ANN YARBROUGH, R.N.
PATRICIA ANN BELL, R.N.
PHYLLIS JEAN LINGER, R.N.
MARTHA LORENE MORRIS, R.N.
BERNETTIE PENNINGTON GNEGY, R.N.
DOROTHY ANN MERO, R.N.

TECHNICIANS

FABRY LIVINGSTONE HAWK, *Assistant Director of Student Health Laboratory*
CHESSIA A. GILMORE, *Technician, University Health Service*

CLERICAL STAFF

ETHEL FEATHER ELLIS, *Receptionist, University Health Service*
MARGARET ANNE WALTER, *Secretary, University Health Service*
THELMA ROSE VANYO, *Clerk, University Health Service*

STANDING COMMITTEES

Admissions and Scholarship: C. K. SLEETH, (Chairman), M. S. HOBBS, R. F. KRAUSE, D. T. WATTS, W. H. HARRELL, R. J. JOHNSON, and LYLE HEROD.

*Part time. In private practice.

Library: W. K. HARRELL (Chairman), G. R. MCKINNEY, J. C. STICKEY, C. K. SLEETH, E. C. GANGLOFF, R. J. JOHNSON, and J. B. HARLEY.

Research, Fellowships, and Grants: D. T. WATTS (Chairman), J. M. SLACK, E. J. VAN LIERE, R. F. KRAUSE, D. W. NORTHUP, A. C. HIGGINGBOTHAM, and R. W. REYER.

Seminars: G. R. MCKINNEY (Chairman), J. C. STICKEY, E. J. VAN LIERE, D. R. SWINDLER, C. C. BOYER, J. J. LAWLESS, and R. W. REYER.

Clinical and Special Facilities: C. K. SLEETH (Chairman), C. B. PRIDE, M. L. HOBBS, G. R. MAXWELL, F. R. WHITTLESEY, J. J. LAWLESS, MAYNARD PRIDE, E. B. TUCKER, C. E. JOHNSON, and J. B. HARLEY.

Curriculum: C. K. SLEETH (Chairman), E. J. VAN LIERE, T. W. WILLIAMS, R. F. KRAUSE, W. K. HARRELL, and R. J. JOHNSON.

Student Loans and Scholarships: J. C. STICKNEY (Chairman), F. J. LOTSPEICH, T. W. WILLIAMS, D. T. WATTS, L. R. SAXE, W. R. GOODGE, and C. C. BOYER.

Policy: Heads of Departments and the Director of the University Health Service.

Graduate Study: J. M. SLACK (Chairman), R. F. KRAUSE, D. R. SWINDLER, H. A. LINDSAY, L. H. SAXE, and R. W. REYER.

Social and Student Orientation: J. C. STICKEY (Chairman), G. R. MCKINNEY, W. K. HARRELL, W. R. GOODGE, M. R. ROSS, C. H. TEMPELIS, and D. R. SWINDLER.

Medical Technology: M. L. HOBBS (Chairman), R. F. KRAUSE, E. J. VAN LIERE, W. K. HARRELL, B. F. LOVE, and C. H. TEMPELIS.

Animal Quarters: L. H. SAXE (Chairman), J. C. STICKNEY, H. A. LINDSAY, M. R. ROSS, E. C. GANGLOFF, and A. C. HIGGINBOTHAM.

Building Committee: J. M. SLACK (Chairman), M. L. HOBBS, R. F. KRAUSE, J. J. LAWLESS, C. K. SLEETH, E. J. VAN LIERE, T. W. WILLIAMS, and J. C. STICKNEY.

Student Fellowships: D. T. WATTS (Chairman), W. K. HARRELL, E. J. VAN LIERE, H. A. LINDSAY, R. J. JOHNSON, T. W. WILLIAMS, and W. R. GOODGE.

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in pre-clinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene; and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The present School of Medicine had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of the American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by arrangement, transfer to other medical schools of their own choice for the completion of the work.

EXPANSION OF THE SCHOOL OF MEDICINE

The West Virginia Legislature has made provision for the establishment of a four-year School of Medicine as well as schools of Dentistry and Nursing. This means that an increased number of students will be accepted and that the M.D. degree will be granted in the near future.

The Basic Sciences Building which houses the pre-clinical departments of the School of Medicine has been occupied since the fall of 1957. The Teaching Hospital is under construction, and after it is completed it will be possible for the University of confer the M.D. Degree.

BUILDINGS AND EQUIPMENT

BASIC SCIENCES BUILDING

The School of Medicine moved into the Basic Sciences Building of the Medical Center in the Summer of 1957. This building consists of a central core containing lecture rooms, laboratories, and other teaching facilities, to which are attached five wings. The core, measuring 225 by 225 feet, is five stories high, with the wings extended an additional 100 feet to the north, east, and west.

Located on the second, third, and fourth floors of this central area are facilities for teaching anatomy, bacteriology, biochemistry, medicine, pathology, pharmacology, physiology, public health and preventive medicine, and surgery. The School of Dentistry occupies the first floor, while the fifth floor contains mechanical equipment. The wings house the administrative offices, the Medical Library, a 500 seat auditorium and such student facilities as lounge, locker rooms, book store, snack bar, cafeteria and post office. The Schools of Nursing and Pharmacy will be housed in one wing.

MEDICAL CENTER LIBRARY

The Library is located on the second floor of the Administrative Wing, with a stack-well extending from the basement up through the center of the Library. With 20,000 square feet of floor space, exclusive of stacks, it will seat 300 students, house 160,000 volumes, and provide for all auxiliary services. On hand are 28,000 volumes of which more than half are periodicals. In the current periodical room about 600 foreign and domestic periodicals will be on display. Fourteen sound-proofed rooms will give space for small group study. There are also a conference room, history of medicine room, and space for microfilm, photostat, and films.

On hand is all the needed material for basic science courses, with excellent representation in the clinical field, to be expanded as the courses progress. While most of the material is in English, there will be outstanding periodicals and books in the major foreign languages. The History collection is being expanded to include good holdings in the secondary material, as well as outstanding original material. This collection is augmented with the holdings of the General University Library and the specialized chemistry library in the Chemistry Building on the main campus.

Associated with each department will be a Seminar Room planned to include a small relevant working library. The Department of Bacteriology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

Material not available in this library may be obtained through inter-library loan from adjacent and large medical libraries throughout the country.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, at Hopemont, West Virginia, is approved by the American Medical Association for residency. It has approximately 400 beds primarily for pulmonary diseases, but a number of beds are set aside for other medical and surgical cases. The School of Medicine has access to this hospital for teaching purposes and the Superintendent and certain members of the staff are also members of the University staff. This arrangement provides an affiliation for instruction in clinical examination of patients.

Monongalia General Hospital and Vincent Pallotti Hospital, two local general hospitals with bed capacities of approximately 160 and 100 respectively, make their facilities available to the School of Medicine for teaching purposes by special arrangement between their administrative officers and the school.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from the Vincent Pallotti Hospital, Monongalia General Hospital, Hopemont Sanitarium, and the private practice of physicians of the area. This arrangement

provides about 200 autopsies per year, and affords opportunity for teaching in gross pathology and medical jurisprudence.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally. The Alumni Association has recently established an annual lectureship.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

GIDEON STANHOPE DODDS LECTURESHIP

Some years ago a group of interested alumni contributed a fund for securing a portrait of Dr. Dobbs, long time professor of histology and embryology. Contributions were sufficiently generous that a substantial balance remained after paying for the portrait.

The income from this fund is now being used to bring to the campus, periodically, some outstanding worker in the field of microscopic anatomy or embryology.

EXPENSES; HOUSING; FINANCIAL AID

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. For information concerning tuition and other fees see the table on page 13. The total legitimate cost of a nine-month session for medical students will range from \$1,000 to \$1,500 exclusive of traveling expenses.

LIVING ACCOMMODATIONS

Medical students, as a rule, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the University dormitories. It is suggested that women contact the Office of the Dean of Women for information concerning off-campus housing, men may obtain such information from the Information Desk in the Administration Building. All arrangements with the landlady or landlord must be made personally by the student.

LOANS AND PART-TIME EMPLOYMENT

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, and others are available to students of all colleges in the University. For information about loans, inquiries should be made to Joseph C. Gluck, Director of Student Affairs, West Virginia University.

The West Virginia State Medical Association has established a fund from which there will be granted \$1,000 each year to a deserving student in each class of the School of Medicine. Each recipient of such an award agrees to practice in a rural area of West Virginia for a period of time following the completion of his education. Information is available from the office of the Dean of the School of Medicine.

A few part-time jobs are available on the campus and in the School of Medicine. Inquiries concerning these may be made to the University Placement Service or to the School of Medicine.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions and Scholarship of the School of Medicine, composed of members of the medical faculty and the office of the Registrar. Admission is by recommendation of this committee and with the approval of the Dean of the School.

WHEN TO APPLY FOR ADMISSION

Application for admission in September, 1959, should be made promptly upon completion of the 1957-58 school year (June 1958). The latest date for filing an application for September, 1959, is December 1, 1958.

HOW TO APPLY FOR ADMISSION

Application for admission must be made upon blanks which may be obtained from the Assistant Registrar, Medical Center. An unmounted photograph, 2½ by 3 inches in size, must accompany the completed application when it is submitted to the Assistant Registrar, Medical Center, West Virginia University, Morgantown, W. Va.

CREDENTIALS

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the Assistant Registrar, Medical Center, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Work subsequently completed should be promptly reported to the Assistant Registrar, Medical Center.

RE-APPLICATIONS

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

COLLEGE CREDITS REQUIRED

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which have been approved by appropriate agencies for premedical education.

Applicants from other colleges will receive consideration based upon the merits of the individual case.

Credits submitted by applicants for work done elsewhere than at West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The applicant should present a broad general education including, whenever possible, a major in some field, not necessarily a natural science. The Committee on Admissions needs evidence of excellence of academic performance and steady progress toward a goal. An excess of credit hours or higher degrees does little to offset the disadvantage of low grades in securing admission to medical schools. The practice of repeating courses to raise the grade is discouraged. Applicants who have been subject to suspension from this or other medical schools can be admitted only in very exceptional cases and at the discretion of the Committee on Admissions and Scholarship.

The requirements outlined below may be met in either of two ways: First and preferably, by pursuing a course of study leading toward a Bachelor's degree with major and minor fields of the applicant's own choosing, or secondly, by following a more rigidly prescribed curriculum generally offered as a "Pre-Medical" curriculum. In either case the applicant must have satisfactorily completed the minimum requirements listed below.

The applicant must present credit from a college of recognized standing for at least 90 semester hours of work exclusive of military science and physical education.

These credits must include the following minimum requirements:

English Composition and Rhetoric 6 hr.

Biological Sciences 12 hr.

Should include 8 hours of General Zoology or 8 hours of General Biology. Comparative Vertebrate Anatomy is desirable, Vertebrate Embryology is suggested.

Chemistry 16 hr.

Must include inorganic chemistry and organic chemistry (aliphatic and aromatic.)

Physics 8 hr.

Psychology 3 hr.

Two years of modern foreign language is suggested.

MEDICAL COLLEGE ADMISSION TEST

The score on this test is used as one criteria of fitness for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Tests are conducted at various centers in the Spring and Fall of each year. It is of advantage to applicants to take the test in the Spring, as many acceptances are issued before the fall test scores are available. Application to take this test must be made more than a month in advance, and students should consult their advisers about this matter at the beginning of the semester or quarter during which the test is to be taken. Information may also be obtained directly from the Testing Service listed above.

PERSONAL ATTRIBUTES

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Good health is a necessary qualification.

RECOMMENDATIONS

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, one instructor in each of departments of biology, physics, and chemistry to send a letter of recommendation to the Assistant Registrar, Medical Center.

NOTIFICATION OF APPLICANTS

All applicants will be informed of the action of the Committee on Admissions and Scholarship as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in November or December.

ADVANCE DEPOSIT FEE

Each applicant is required to make a deposit of \$25 before his name is entered upon the official list of those accepted for admission to the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant.

GENERAL RULES OF THE SCHOOL OF MEDICINE

REGISTRATION

All medical students are expected to register at the Medical Center on the days set apart for registration at the beginning of each semester. These dates are given in the University Calendar on page 1.

No student will be permitted to register in the School of Medicine after the first week of classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Committee on Admissions and Scholarship and the professor in charge of the course.

TUITION AND OTHER FEES

All University fees are subject to change without notice.

All fees are due and payable at the Office of the Comptroller, Medical Center, on the days¹ of registration.

	<i>Resident</i> ²	<i>Non-Resident</i>
University Fee (per semester)	\$133.00*	\$351.00*
Total per academic year	\$266.00	\$702.00

Laboratory Fees and Deposits

Breakage Deposit	10.00	10.00
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Special Fees

Late Registration Fee	\$ 2.00	\$ 2.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

<i>Part-Time Students</i> (per semester hour)	8.00	26.00
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Special fee for students not regularly enrolled in the School of Medicine or the College of Pharmacy, \$4.00 per credit hour in addition to the fee charged in the college or school in which they are registered.

Laboratory fee for University students not regularly enrolled in the School of Medicine: for one laboratory course \$5.00 and for more than one laboratory course \$10.00.

Microscopes may be rented from the Book Store at a cost of \$20.00 per semester.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the School of Medicine during the semester should do so in the regular manner. Consult the office of the Assistant Registrar, Medical Center for instructions as to withdrawal.

EXAMINATIONS

It is the policy of the various departments of the School of Medicine to conduct examinations from time to time in order that both faculty and students may be kept aware of the individual student's progress. A formal final examination is conducted at the end of each course.

In addition to these departmental examinations, which help serve as a basis for recording grades in various subjects, other examinations may be conducted at

*These fees are required of all full-time students enrolled in the University. "University Fee" includes: Mountainlair Fee—\$2.00; Student Activity Fee—\$8.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

¹Students who have not paid their fees before the close of office hours on the second Saturday following the opening of a semester or a summer term, shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

²No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction or exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover, any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of non-attendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

times for other purposes. At the end of the first year a comprehensive examination, designed by the entire faculty and intended to serve as a measure of adequacy of curriculum coverage, may be required. It is to be emphasized that this examination will not be used to determine a student's grade in any course or courses.

After the end of the second year, the students may be required to take Part I of the National Board of Medical Examiners Examination, which is usually given in mid-June. Since this is a school requirement, it will be without cost to the student. However, if the student wishes to utilize his score on this examination as part of his performance for certification by the National Board of Medical Examiners, he can arrange to do so by the payment of an additional fee direct to that Board. More complete information may be obtained in the office of the Dean of the School of Medicine.

PROMOTIONS AND SUSPENSIONS

The Committee on Admissions and Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Committee on Admissions and Scholarship.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered, is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed within the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Admissions and Scholarship. (University Rule.)

For medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation of the same academic year.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Committee on Admissions and Scholarship.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Committee on Admissions and Scholarship of the School of Medicine. This permission is not valid until it has been reported to the Assistant Registrar, Medical Center for record.

PROFICIENCY IN ENGLISH

The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this

examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their work after June 1, 1952. Students who have not previously satisfied this requirement must take this examination in their first semester of registration in the School of Medicine.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia as noted on page 8.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. For complete information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements* of the Graduate School.

Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

CURRICULUM REVISION

The curriculum of the School of Medicine is constantly under study by a special committee and by all members of the faculty. In the interests of offering the best possible course of instruction, curriculum revisions are made from time to time.

COURSES OF INSTRUCTION

NOTE—Courses marked "*" are required of first-year students; those marked "+" are required of second-year students.

The following abbreviations are used in designating the semester during which these courses are offered, and also the credit hours of each course:

- I—a course given in the first semester.
- II—a course given in the second semester.
- I, II—a semester course given in each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course offered in the Summer Session.
- hr.—number of credit hours per course.

For convenience each course is designated by the name of the department offering the course and the number of the course. The plan for numbering courses at West Virginia University is as follows:

- Courses 1 to 99—offered primarily for freshmen and sophomores
- Courses 100 to 199—offered primarily for juniors and seniors
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates
- Courses 300 to 399—offered to graduates only

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information, see *Announcements of the Graduate School*.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professors GANGLOFF and LOTSPEICH; Instructor CANADY.

139. GENERAL BIOCHEMISTRY. I. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics. Open to other qualified students.
230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.
- 231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lecture, 4 hr. per week; lab. 8 hr.
- 237, 238. SEMINAR IN BIOCHEMISTRY. I, II. 1 hr. per semester. PR or Conc.: Biochemistry 231. Presentation and discussion of special topics.
239. CLINICAL BIOCHEMICAL TECHNIQUES. II. 4 hr. PR: General or Medical Biochemistry. Primarily for students in Medical Technology. Open to other qualified students. Primarily a laboratory course designed to study chemical techniques used in clinical laboratories.
- 330, 331. BIOCHEMICAL PREPARATIONS. I, II, S. 2-5 hr. Arranged. PR: Biochemistry 231 or equivalent. Emphasis on biochemical methods.
- 333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochemistry 231 or equivalent.

GROSS AND NEUROLOGIC ANATOMY

Professor JOHNSON; Associate Professor BOYER; Instructors GOODGE and SWINDLER.

- 201.* GROSS ANATOMY. I. 6 hr. PR: General Zoology. Comparative Anatomy and Embryology desirable. Gross structure of the human body, including pertinent aspects of embryonic development. Lecture, 2 hr. per week; lab. 7 hr.
- 202.* GROSS ANATOMY. II. 5 hr. PR: Anatomy 201. Continuation of Anatomy 201. Lecture, 3 hr. per week; lab., 7 hr.
- 203.* NEUROANATOMY. II. 5 hr. PR: Anatomy 201. The gross and microscopic structure of the nervous system with notes on its embryonic development. Lect. 3 hr. per week; lab. 6 hr.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, and STARKEY; Instructors JOHNSON and HARLEY.

- 275.† HISTORY OF MEDICINE. I. 1 hr. A brief history of the development of the science and art of medicine. Lecture, 1 hr. per week.
- 277.* CORRELATION CLINIC. I. 1 hr. Practical demonstrations of the relation of the basic sciences to clinical medicine using the case method. Members of the various basic science departments participate along with the Department of Medicine.
- 278.* CORRELATION CLINIC. II. 1 hr. A continuation of Medicine 277.
- 291.† PHYSICAL DIAGNOSIS. I. 2 hr. Lecture and demonstration of the technique of taking clinical histories and performing physical examinations.
- 292.† PHYSICAL DIAGNOSIS. II. 1 hr. Practical experience in examination of normal and abnormal subjects.
- 293.† INTRODUCTORY MEDICINE. I. 1 hr. Lectures and demonstrations of patients exhibiting the cardinal manifestations of disease and specific disease entities.
- 294.† INTRODUCTORY MEDICINE. I. 1 hr. A continuation of Medicine 293.

MICROBIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professors HARRELL and ROSS; Instructor TEMPELIS; Lecturer VIGGIANO; Assistant PAVLECH.

- 218.† MEDICAL PARASITOLOGY. II. 2 hr. PR: Consent. Introduction to animal organisms as human pathogens and vectors of disease. Lect. 1 hr., lab 2 hr. per week.
220. PATHOGENIC MICROBIOLOGY FOR PHARMACY STUDENTS. II, S. 5 hr. PR or Conc: Chem. 233 (organic). A detailed study of pathogenic micro-organisms with emphasis on material important to Pharmacy. Lect. 3 hr., lab. 6 hr. per week. Graduate students required to do 1 hr. additional work per week for 3 hr. credit.
- 221.† MEDICAL MICROBIOLOGY. I. 6 hr. PR or Conc: Chem. 233, 238 (organic), Med. Biochem. 231 desirable. Detailed study of the pathogenic micro-organisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of body to bacterial diseases. Lect. 3 hr., lab 9 hr. per week.
- 222.† PUBLIC HYGIENE. II. 2 hr. PR: Consent. Introduction to principles of public health. Lect. 2 hr. per week.
223. PATHOGENIC MICROBIOLOGY FOR MEDICAL TECHNOLOGY STUDENTS. II, S. 5 hr. PR or Conc: Chem. 131 (organic). A detailed study of pathogenic micro-organisms with emphasis on material important to Medical Technology. Lect. 3 hr., lab. 6 hr. per week. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
224. MEDICAL PARASITOLOGY FOR MEDICAL TECHNOLOGY STUDENTS. II. 4 hr. PR: Consent. Study of animal parasites and vectors of disease with emphasis on laboratory methods. Lect. 3 hr., lab 3 hr. per week.
- 226, 227. SPECIAL PROBLEMS IN MICROBIOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Microbiology 221 or equiv.
228. DIAGNOSTIC MICROBIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Microbiology 221 or equiv. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
229. DETERMINATIVE MICROBIOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Microbiology 221 or equiv. Use of morphological, physiological, and immunological methods for the identification of micro-organisms.
- 320, 321. ADVANCED MICROBIOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Microbiology 221 or equiv. and graduate standing. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsiae, and viruses.
- 323, 324, 325, 326. RESEARCH IN MICROBIOLOGY. I, II, S. 1-6 hr. per sem. Hours to be arranged. PR: Microbiology 221, 320, or equivalent.

MICROSCOPIC ANATOMY AND ORGANOLOGY

Professor WILLIAMS; Associate Professors HIGGINBOTHAM and REYER.

- 205.* MICROSCOPIC ANATOMY AND ORGANOLOGY. I. 6 hr. PR: Zool. 1, 2 or equiv. The minute anatomy and functional aspects of tissues and organs, with brief reviews of their embryonic development. Lect. 3 hr., lab. 6 hr. per week.

OBSTETRICS

Professor VAN LIERE

- 296.† OBSTETRICS. II. 2 hr. PR: Anatomy 201, 202 (Human Anatomy), Physiology 241 and Pathology 251. An introductory course in obstetrics. Lecture 2 hr. per week.

PATHOLOGY

Professor HOBBS; Assistant Professors HARLEY and LOVE; Instructor EHRGOTT.

150. **ELEMENTARY HISTOLOGY. I.** 3 hr. A study of the elements of histological structure, including blood. Lecture, 2 hr. per week; laboratory 3 hr. Required of students in Medical Technology. Other students as approved by the department.
151. **CLINICAL LABORATORY DIAGNOSTIC METHODS. II.** 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lecture, 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† **GENERAL AND TUMOR PATHOLOGY. I.** 6 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lectures, 4 hr. per week; lab., 10 hr.
- 252.† **SPECIAL PATHOLOGY. II.** 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lecture, 1 hr., lab., 2 hr. per week.
- 254.† **CLINICAL PATHOLOGY. II.** 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lecture, 2 hr. per week, lab. 6 hr.
256. **ADVANCED PATHOLOGY. I or II.** 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. **EXPERIMENTAL PATHOLOGY. I or II.** 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professor WATTS; Associate Professor MCKINNEY; Assistant Professor SAXE; Lecturer TUCKER.

160. **FUNDAMENTALS OF PHARMACOLOGY. I.** 5 hr. PR: Physiology 141. For students in the College of Pharmacy. Lecture, 4 hr. per week; laboratory, 3 hr.
- 262† **MEDICAL PHARMACOLOGY. II.** 6 hr. PR: Physiology 141 or 241. Origin, chemistry, pharmacodynamics, toxicology, therapeutic use and dosage of drugs commonly used in man and animals with emphasis on the fundamental mechanisms of drug action. Lecture, 5 hr. per week; lab., 6 hr. per week.
266. **BIOCHEMOPHYSIOLOGY. II.** 2 hr. PR: Pharmacology 262, or Chemistry 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.
- 360, 361. **BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S.** 3 hr. per semester. PR: Pharmacology 262; or Chemistry 238 or 277 and Micro. Anat. 205; or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. **ADVANCED PHARMACOLOGY. I, II, S.** 2-5 hr. per semester. Hours to be arranged. PR: Pharmacology 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. **TOXICOLOGY. I, II, S.** 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. **ANESTHESIOLOGY. I, II, S.** 3 hr. PR: Physiology 241. Production of surgical anesthesia in man and animals. General anesthetic agents and procedures, additional agents for proper control of anesthesia, and care of the anesthetized individual.
- 366, 367, 368, 369. **RESEARCH IN PHARMACOLOGY. I, II, S.** 1-6 hr. per semester. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP, VAN LIERE, and STICKNEY; Assistant Professor LINDSAY.

141. ELEMENTARY PHYSIOLOGY. I. 4 hr. PR: Biology 1, 2 or Zoology 1, 2; PR or concurrent: Chemistry 131 (Organic Chemistry). For students in Pharmacy and Medical Technology. Lecture, 3 hr. per week; lab., 3 hr. per week.
- 241.* PHYSIOLOGY. II. 9 hr. PR: Zoology 231 (Comparative Anatomy), Biochemistry 231. Physiology for Medical Students. Lecture, 7 hr. per week; laboratory, 8 hr.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiology 241.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiology 241. Historical review, advanced topics and latest developments in the physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM. II. 2-5 hr. Hours to be arranged. PR: Physiology 241. Historical review, advanced topics and latest developments in the physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiology 241. Psychology 1 or Neuroanatomy 203. Historical review, advanced topics and latest developments in physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I. 2-5 hr. Hours to be arranged. PR: Physiology 243. Historical review, advanced topics and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructors M. PRIDE and HEISKELL; (in cooperation with members of THE DEPARTMENT OF ANATOMY).

- 281.† PRINCIPLES OF SURGERY. I. 1 hr. Lectures and demonstrations of the fundamental principles of surgery.
- 281.† PRINCIPLES OF SURGERY AND SURGICAL ANATOMY. II. 2 hr. Demonstrations of operative techniques; lectures and demonstrations of the importance of anatomy to clinical surgery.

II. Curriculum in Medical Technology

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), Chairman
R. F. KRAUSE, (Professor of Biochemistry)
W. K. HARRELL (Assistant Professor of Microbiology)
E. J. VAN LIERE (Dean of the School of Medicine)
C. H. TEMPELIS (Instructor in Microbiology)
B. F. LOVE (Technical Director of Curriculum in Medical Technology)

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as medical technologists in hospitals, clinics, research laboratories, and in the offices of private physicians.

Training standards for technologists are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association. Properly qualified graduates, upon passing the required examinations, may be eligible for certification by the Board of Registry of Medical Technologists of the American Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, requires two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

REQUIREMENTS FOR ADMISSION

For admission to the curriculum in Medical Technology, the applicant must have graduated from high school and present at least 15 units of high school work acceptable to the University, including 1 unit in elementary algebra and one unit in plane geometry.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 hours, exclusive of military science, as specified below:

English. 12 semester hours. (Must include 6 hours composition and rhetoric and 6 additional hours in literature.)

Modern Foreign Language. 12 hours.

Biological Science. 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry. 16 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 4 hours; Organic Chemistry, 4 hours.)

Physics. 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Students should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry and comparative anatomy.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms which may be obtained from the Assistant Registrar, Medical Center. Application should be made in February of the second pre-technology year. When applying, unless he is in residence at West Virginia University, the student should request the registrar of his college to send an official transcript of his work to the Assistant Registrar, Medical Center.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the School of Medicine. Notification will be sent after April 1.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in selecting students. Applicants from institutions other than West Virginia University should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

TUITION AND OTHER FEES

All University fees are subject to change without notice. Students in Medical Technology pay the following fees in their junior and senior years. All fees are due and payable at the Office of the Comptroller, Medical Center, on the days of registration.³

Tuition Fees

	<i>Resident⁴</i>	<i>Non-Resident</i>
University Fee (per semester)	\$ 71.00*	\$246.00*
Total per academic year	142.00	492.00
Summer (per semester hour) ⁵	4.00	8.00

Laboratory Fees and Deposits

Breakage Deposit	10.00	10.00
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Special Fees

Late Registration Fee	\$ 2.00	2.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

Special fees for students not enrolled in the School of Medicine or the College of Pharmacy, \$4.00 per credit hour in addition to the fee charged in the college or school in which they are registered.

Laboratory fee for students not regularly enrolled in the School of Medicine, for one laboratory course, \$5.00 and for more than one laboratory course, \$10.00.

Microscopes may be rented from the Bookstore at a cost of \$20.00 per semester.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

*These fees are required of all students enrolled in the University. "University Fee" includes: Mountainlair Fee—\$2.00; Student Activity Fee—\$8.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

³Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester or a summer term, shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction or exemption of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover, any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of non-attendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

⁵In addition, Mountainlair Fee .75 per term and Student Union Building Fee \$1.00 per term for full time students.

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year. The grade-point average for the third year must be at least 1.5 per registration hour.

Before being accepted in the fourth year clinical phase of medical technology, an approved transcript evaluation from the Registry of Medical Technologists of the American Society of Clinical Pathologists, Muncie, Indiana, must be on file in the office of the Assistant Registrar, Medical Center.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During the first year of enrollment in the School of Medicine students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Semester</i>	<i>Hr.</i>	<i>Second Semester</i>	<i>Hr.</i>
Comparative Anatomy 231	5	Parasitology 255	4
Pathology 150	3	Microbiology 223	5
Biochemistry 139	4	Biochemistry 239	4
Physiology 141	4	Pathology 151	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygienic Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. **LABORATORY PRACTICES.** Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. **APPLIED BACTERIOLOGY.** Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. **APPLIED PARASITOLOGY.** Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. **APPLIED SEROLOGY.** Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. **CLINICAL CHEMISTRY.** Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. **ELECTROCARDIOGRAPHY.** Yr. 2 hr. Study of the electrocardiographic machine and its practical employment on patients.
106. **METABOLIMETRY.** Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. **MICROTECHNIQUE.** Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. **NORMAL HEMATOLOGY.** Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.

- 109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
- 110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
- 111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

III. General University Information

ADMISSION REQUIREMENTS

Candidates for admission to the University must be at least sixteen years of age. They may be admitted either by examination or on the basis of official transcripts of record. Transcripts of secondary school record must be sent by the principal directly to the Registrar of the University immediately after the student's graduation;¹ transcripts of college or university record must be sent by the registrar of the other institution directly to the Registrar of the University immediately after the student has completed his work in that institution. Transcripts should be received by the Registrar of the University at least three weeks prior to the beginning of the term or semester in which the applicant is interested. The transcripts received in support of applications for admission become the property of the University and are permanently filed in the office of the Registrar.

Applicants for admission who do not have transcripts showing graduation from accredited secondary schools on file in the office of the Registrar of the University or who do not have official transcripts from colleges or universities previously attended on file in the office of the Registrar of the University, may, at the discretion of the Committee on Admissions, be permitted to register provisionally. If satisfactory transcripts cannot be obtained, the registration will be cancelled and the fees paid by the applicant will be returned, in accordance with the University refund schedule. A provisional registration will not be continued for a period longer than one week.

Conditional Admission. Students must make up all deficiencies before they can be classified as sophomores.

SPECIAL STUDENTS

Mature students, offering at least nine units of the requirements for admission, including two units of English, may, upon written application to the Committee on Admissions, be permitted to register as special students. Special students must make up all deficiencies before they can be classified as sophomores.

ENTRANCE UNITS

A unit in any subject represents the amount of work that may be done in a standard high school year of thirty-six weeks, with five recitation periods per week, of no less than forty minutes each. In courses where laboratory work is required, from two to three periods of laboratory work are considered the equivalent of one period of recitation according to the amount of outside preparation required in connection with such work.

For admission to West Virginia University the student must have graduated from high school and present 15 units of high school work acceptable to the University.

A. The following groups are required:

1. Four units of English.²
2. Three units in a second subject.
3. Two units in each of two other subjects.
4. One unit of plane geometry is required of premedical, pre dental, and premedical technology students and of students who intend to select chemistry, geology, mathematics, or physics as their major subject.

Either the three-unit subject or one of the two-unit subjects must include one unit of algebra.

B. Work in the following subjects not to exceed the number of units placed after each subject will be accepted.

¹In accrediting West Virginia secondary schools the University follows the classification made by the State Department of Education.

²A student may enter the University with 3 units of English and satisfy admission requirements by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition, or English 1, Composition and Rhetoric.

<i>Subject</i>	<i>Units</i>	<i>Subject</i>	<i>Units</i>
English ²	4	Sciences ⁵	
Journalism	1	Biology ⁶	1
Speech	1	Botany ⁶	1
Foreign languages ³		Chemistry	1
French	3	General Science	1
German	3	Geology	1
Greek	3	Physical Geography	1
Italian	3	Physics	1
Latin	4	Physiology	1½
Spanish	3	Zoology ⁶	1
Education	2	Commercial geography	½
Mathematics		Commercial law	½
General	1	Vocational subjects (not to	
Algebra	2	exceed 5 units)	
Plane geometry	1	Agriculture	4
Solid geometry	½	Home Economics	3
Trigonometry	½	Industrial training	3
History and Social Science ⁴		Bookkeeping, or bookkeeping	
History	3	and commercial arithmetic	2
Social Science	3	Commercial arithmetic (alone) ..	½
Drawing		Shorthand	2
Free-hand drawing	1	Typing	1
Mechanical drawing	1	Aeronautics	1
Music	2	Art	1
		Hygiene	1
		Physical education	1

CREDIT ACCEPTED FROM A JUNIOR COLLEGE

The maximum credit accepted from a junior college accredited by the North Central Association of Colleges and Secondary Schools or other regional accrediting association will not exceed seventy-two (72) semester hours, and credit will be allowed for lower division courses only. No credit will be allowed for courses completed in a junior college subsequent to attainment of junior or higher rank by the student at the University.

ADVANCED STANDING EXAMINATION

Application for advanced standing on work of college grade for which college credit cannot be established on the basis of official transcript of record, should be made to the Registrar of the University not later than two weeks after the applicant's matriculation. Upon payment of the proper fee the Registrar will issue an examination permit. After examination, the department will report to the Registrar the University course, if any, for which the applicant is entitled to credit.

REGISTRATION

Persons who are not registered as students in the University or who are not members of its administrative or teaching staffs shall not be admitted to regular attendance in University classes.

All students are expected to register on the days set apart for registration at the beginning of each semester or term of the University. All freshmen are required to take intelligence, placement, medical, and physical tests.

Immediately after completion of their registration, all students are expected to pay their fees at the Office of the Comptroller, or Medical Center, or at the Comptroller's desk in the Field House, depending on the place of registration.

²See Footnote 2, page 24.

³One unit of Latin will accepted. No less than 2 units of either French, German, Greek, Italian, or Spanish will be accepted unless sufficient additional work in that language is taken in college to complete a minimum of 2 units.

⁴A group of 3 units may be formed combining 2 units of history with 1 unit of social science or 2 units of social science with 1 unit of history.

⁵A group of 2 or 3 units in science may be made by combining one unit each of any 2 or 3 of the following: biology, botany, chemistry, geology, physics, and zoology.

⁶If a student presents one unit of biology for admission, he may have credit for no more than ½ unit in either botany or zoology.

WITHDRAWAL FROM THE UNIVERSITY

A student who desires to withdraw from the University must obtain a withdrawal card from the office of the Registrar. Withdrawal procedure will be explained to him when he obtains the card.

Students who withdraw from the University without permission will receive at the end of the semester or term a grade of "F" (failure) in each of the subjects for which they are registered and will be indefinitely suspended from the University.

Students who desire to drop part of their work may withdraw from classes in which they are enrolled with a grade of "W" at any time prior to the end of the second week following the date set for midsemester reports. Withdrawal permit must be approved by the adviser and filed with the Registrar. If such withdrawal reduces the student's hours below the required minimum, the permit must be approved by the Scholarship Committee. Withdrawals after the above date will be permitted only in exceptional cases and must be approved by the Scholarship committee of the college in which the student is registered.

CAMPUS PARKING REGULATIONS

Students are required to observe all rules and regulations of the University with respect to the parking of motor vehicles on the campus.

ENGLISH PROFICIENCY EXAMINATION

Each undergraduate who begins college work after June 1, 1952, must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take the examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary. The examination shall be administered by the English Proficiency Board.

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

A—excellent—given only to students of superior ability and attainment

B—good—given to those students who are well above average but who are not in the highest group

C—fair—average students

D—poor but passing

I—incomplete

F—failure

W—all withdrawals prior to end of second week following date for mid-semester reports

WP—withdrew passing

WF—withdrew failing

X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF"—0. When the grade of "I" becomes converted into a grade carrying credit the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are computed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination,

including blood tests, urinalysis, and X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the College of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes three full time and five part time physicians, a consulting radiologist, six nurses, and two laboratory technicians. The Departments of Pathology and Microbiology cooperate in various diagnostic laboratory procedures.

The Health Service occupies a well-designed University Health Center constructed in 1941. The three-story building centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to the University Pharmacy. On the second floor are additional offices for physicians as well as the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients.

The third floor of the Health Center is equipped with about 20 beds and operates as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

MEDICAL STUDENTS 1957-1958

FIRST YEAR STUDENTS (ENTERED SEPTEMBER 1957)

Brooks, Marion Howard	Glen Rogers
Curry, William Lake (A.B., West Virginia University, 1957)	Barboursville
Dailey, Robert Wood, Jr. (B.S., Davis & Elkins College, 1949)	Romney
Dawson, Robert Lloyd (B.S., Marshall College, 1957)	Huntington
Dawson, Wallace Lantz (A.B., West Virginia University, 1957)	Kingwood
Dawson, William Sidney, Jr. (A.B., Berea College, 1954)	Logan
Dugan, Thomas Marshall (B.S., West Virginia State College, 1957)	South Charleston
Ferguson, Joseph Alexander (B.S., University of Kentucky, 1957)	Huntington
Fidler, Robert Young (A.B., West Virginia University, 1957)	Belle
Germon, Patricia Ann (B.S., Bethany College, 1951)	Wellsburg
Glover, Douglas Dennis (B.S., Pharm., West Virginia University, 1951)	Rowlesburg
Groves, Louis William, Jr.	Meadow Bridge
Heagarty, Margaret Caroline (B.A., Seton Hill College, 1957)	Beckley
Hicks, Donald Lee (A.B., Columbia University, 1957)	Beckley
Janicki, Thomas Joseph (B.S., Fairmont State College, 1957)	Barracksville
Johnson, William Waldo (B.S., Morris Harvey College, 1954)	Charleston
Kostello, Robert Theodore (B.S., West Virginia University, 1957)	Benwood
Maiolo, Joseph Anthony (A.B., West Virginia University, 1957)	Morgantown
Maxey, Stephen Stone (A.B., West Virginia University, 1957)	Montcoal
Maxwell, George Ralph, II (A.B., West Virginia University, 1957)	Morgantown
Mazzocco, Victor Eugene (A.B., West Virginia University, 1950)	Morgantown
Meador, James Carr, Jr. (B.A., Duke University, 1957)	Charleston
Miller, James Barry (A.B., West Virginia University, 1957)	Morgantown
Pasquale, Samuel Anthony (A.B., West Virginia University, 1957)	Williamson
Pavilack, Samuel Anthony (A.B., Harvard College, 1957)	Wheeling
Pendleton, Thomas Hale	Princeton
Poole, Thomas Robert (B.S., Marshall College, 1953)	
M.S., West Virginia University, 1957)	Glasgow
Power, Curtis Garland, Jr. (A.B., West Virginia University, 1957)	Martinsburg
Pyles, Thomas Eugene (A.B., West Virginia University, 1956)	Valley Grove
Reed, Joseph Blount (A.B., West Virginia University, 1957)	Burlington
Repaire, John Richard	Montgomery
Snyder, James Leigh	Crumpler
Spiggle, Wayne Campbell (A.B., Berea College, 1956)	Davis
Sponaugle, Harlan Dale	Franklin
Tolley, Gary Maurice (B.S., Marshall College, 1957)	Huntington
Van Gilder, John Corley (A.B., West Virginia University, 1957)	Sutton
Van Winkle, Charles (B.S., Marshall College, 1957)	Charleston
Wanger, William Halvard (B.S., Muskingum College, 1957)	Shepherdstown
White, David Lee (A.B., West Virginia University, 1957)	Morgantown
Wotring, James William, Jr. (A.B., West Virginia University, 1957)	Kingwood
Yurko, Anthony Andrew (B.S., William and Mary College, 1957)	Weirton

SECOND YEAR STUDENTS

Anderson, Carl Leslie (A.B., West Virginia University, 1956)	Glen Dale
Ashworth, Charles Vincent, Jr. (A.B., West Virginia University, 1956)	Moundsville
Boscka, David Anderson	Morgantown
Bragg, Arthur Danc (B.S., Virginia Polytechnic Institute, 1952)	Gilbert
Conley, William Gustavus, III (A.B., West Virginia University, 1956)	Charleston
Drasnin, Donald (A.B., Northwestern University, 1955)	Charleston
Fisher, Gilbert Franklin, Jr.	Huntington
Gemma, Frank Eugene (A.B., West Virginia University, 1956)	Clarksburg
Ghaphery, James Louis (A.B., West Virginia University, 1956)	Wheeling
Gilliland, Robert Lee (B.S., George Peabody College, 1955)	Belle
Harman, Janet Rosalee (B.S., West Virginia University, 1952)	Harman
Hatfield, Kenneth Byron (B.S., University of Kentucky, 1955)	Charleston
Howes, Thomas Martin	Charleston

Hughes, James Thomas, (B.S. Pharm., West Virginia University, 1955)	Spencer
Kelley, David Leroy, (A.B., West Virginia University, 1956)	Moundsville
Kopinski, Joseph Clemens, (A.B., West Virginia University, 1956)	Scarbro
McKown, Charles Henry, Jr., (A.B., West Virginia University, 1956)	Wayne
McWhorter, William David	Clarksburg
Martino, Robert S., (A.B., West Virginia University, 1953)	Morgantown
Murphy, Eugene Leo, (A.B., West Virginia University, 1956)	Clarksburg
O'Conner, Robert Darrell, (A.B., West Virginia University, 1956)	Charleston
Pitsenberger, John David	Huntington
Russell, Donlad Eugene, (A.B., West Virginia University, 1954)	Morgantown
Schwab, Lowell Wayne, (A.B., West Virginia University, 1956)	Kingwood
Staats, Okey James, (B.A., University of Virginia, 1955)	Huntington
Stovall, Richard Lee, (B.S., Concord College, 1955)	Princeton
Wells, Hawey Adolphus, Jr.	Athens
Whittaker, William B.	Dunbar
Wickham, James Robert, (A.B., West Virginia University, 1956)	Grafton
Wolfe, Walter Woods, Jr.	Parkersburg

STUDENTS IN MEDICAL TECHNOLOGY

JUNIOR YEAR

Barr, Jean Lynn	Keyser
Dill, Joan Christine	Wheeling
Nichaus, Carole Lynn	Wheeling

SENIOR YEAR

Rhodes, Susan	Morgantown
Spiker, James Edgar	Inwood
Wallace, Mary Farr	West Union
Forinash, Carolyn Jean	Huttonsville
Lawson, Anne Cornelia	Grafton
Levine, Shirley Ruth	Morgantown
O'Kelly, Molly Elizabeth	Parkersburg
Petracca, Thelma Rose	Fairmont
Schoppert, Betty Sue	Westernport, Maryland
Wilbourn, Mary Elizabeth	Clarksburg



- Key.** 1. Administration Building
2. Women's Dormitories
3. Men's Dormitory
4. Stadium
5. Fieldhouse
6. West Virginia University Medical Center
A. Basic Sciences Building
B. Teaching Hospital (under construction)
C. Mechanical Plant
7. Monongalia General Hospital Property



SCHEDULE OF COURSES FOR 1957-58

Course	Hr. Per Week			Hr. Per Semester			Semester Credit Hours
	Lect.	Lab.	Total	Lect.	Lab.	Total	
First Year—First Semester							
Gross Anatomy 201	2	7	9	32	112	144	6
Microscopic Anatomy 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	8	12	64	128	192	7
Correlation Clinic 277	1	0	1	16	0	16	1
First Year—Second Semester							
Gross Anatomy 202	3	7	10	48	112	160	5
Neuroanatomy 203	3	6	9	48	96	144	5
Physiology 241	7	8	15	112	128	240	9
Correlation Clinic 278	1	0	1	16	0	16	1
Second Year—First Semester							
Medical Microbiology 221	3	9	12	48	144	192	6
General and Tumor Pathology 251	4	10	14	64	160	224	6
Physical Diagnosis 291	2	0	2	32	0	32	2
Introductory Medicine 293	1	1	2	16	16	32	1
History of Medicine 275	1	0	1	16	0	16	1
Principles of Surgery 281	2	0	2	32	0	32	1
Second Year—Second Semester							
Public Hygiene 222	2	0	2	32	0	32	2
Special Pathology 252	1	2	3	16	32	48	2
Clinical Pathology 254	2	6	8	32	96	128	3
Medical Pharmacology 262	5	6	11	80	96	176	6
Physical Diagnosis 292	0	2	2	0	32	32	1
Introductory Medicine 294	1	1	2	16	16	32	1
Principles of Surgery and Surgical Anatomy 282	0	2	2	0	32	32	2
Introduction to Obstetrics 296	2	0	2	32	0	32	2
Parasitology 218	1	2	3	16	32	48	2

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Biochemistry						Micro-Anatomy			
T	Gross Anatomy						Micro-Anatomy			
W	Biochemistry						Gross Anatomy	Corr. Clinic		
Th	Gross Anatomy						Micro-Anatomy			
F	Biochemistry						Micro-Anatomy			

FIRST YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Physiol.	Neuro Anatomy					Physiology			
T	Physiology						Gross Anatomy			
W	Physiol.	Gross Anatomy								
Th	Physiol.	Neuro Anatomy					Gross Anatomy			
F	Physiol.	Neuro Anatomy					Physiology		Corr. Clinic	

SECOND YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Medicine Clinic	Physical Diagnosis	Surgery				Pathology			
T	Microbiology						Pathology			
W		History of Medicine	Physical Diagnosis	Surgery						
Th	Microbiology						Pathology			
F	Microbiology						Pathology			

SECOND YEAR—SECOND SEMESTER

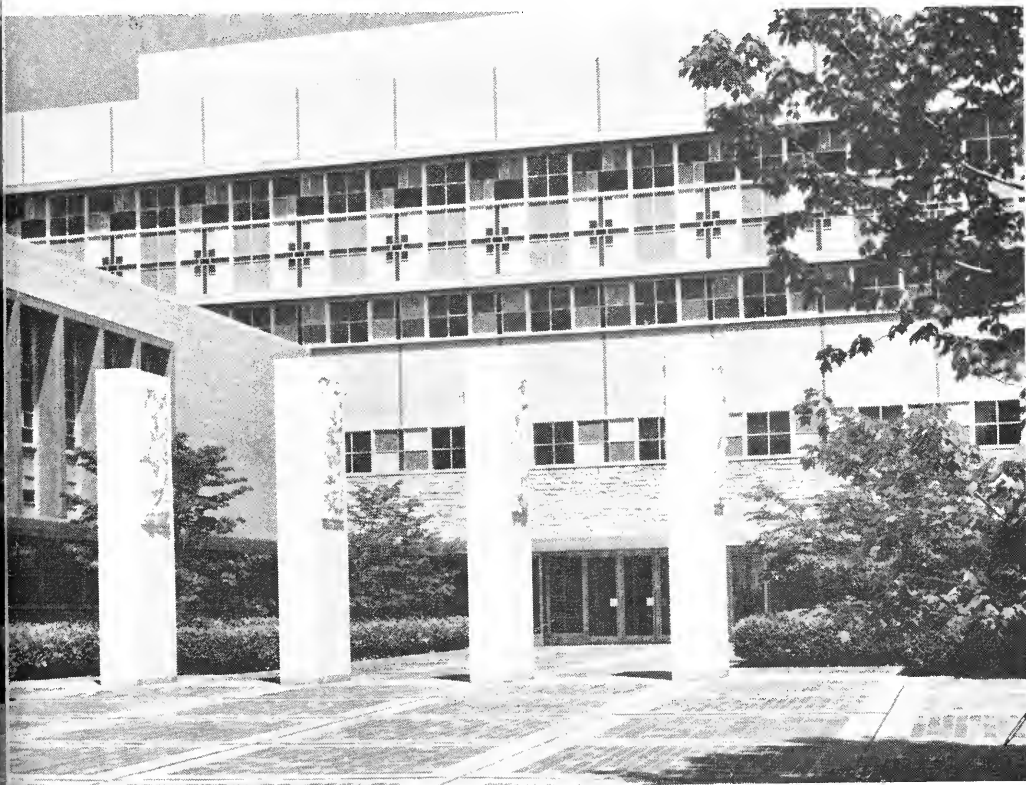
	8	9	10	11	12	1	2	3	4	5
M	Surgery & Surg. Anatomy	Obstetrics	Pharmacology				Clinical Pathology			
T	Pharmacology						Clinical Pathology			
W	Public Hygiene	Medicine	Pharmacology							
Th	Medicine	Special Pathology					Parasitology			
F	Physical Diagnosis	Obstetrics	Pharmacology				Pharmacology			





WEST VIRGINIA UNIVERSITY

The School of **MEDICINE**



WEST VIRGINIA
UNIVERSITY
BULLETIN

ANNOUNCEMENTS 1959-60

YEAR 1959

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
					1	2	1	2	3	4	5	6	7	1	2	3	4	5	6	7					1	2	3	4
4	5	6	7	8	9	10	8	9	10	11	12	13	14	8	9	10	11	12	13	14	5	6	7	8	9	10	11	
11	12	13	14	15	16	17	15	16	17	18	19	20	21	15	16	17	18	19	20	21	12	13	14	15	16	17	18	
18	19	20	21	22	23	24	22	23	24	25	26	27	28	22	23	24	25	26	27	28	19	20	21	22	23	24	25	
25	26	27	28	29	30	31								29	30	31					26	27	28	29	30			

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31		23	24	25	26	27	28	29
31																					30	31					

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4					1	2	3	1	2	3	4	5	6	7				1	2	3	4	5
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	
27	28	29	30				25	26	27	28	29	30	31	29	30						27	28	29	30	31			

YEAR 1960

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1 2																						
3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12	3	4	5	6	7	8	9	
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19	10	11	12	13	14	15	16	
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26	17	18	19	20	21	22	23	
24	25	26	27	28	29	30	28	29						27	28	29	30	31			24	25	26	27	28	29	30	
31																												
MAY							JUNE							JULY							AUGUST							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1						1	2	3	4					1	2					1	2	
1	2	3	4	5	6	7	5	6	7	8	9	10	11	3	4	5	6	7	8	9	7	8	9	10	11	12	13	
8	9	10	11	12	13	14	12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20	
15	16	17	18	19	20	21	19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27	
22	23	24	25	26	27	28	26	27	28	29	30			24	25	26	27	28	29	30	28	29	30	31				
29	30	31												31														
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
						1							1						1	2	3					1	2	3
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10	
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17	
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24	
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31	
							30	31																				

ON THE COVER

Pylons at the entrance of the West Virginia University Medical Center.

UNIVERSITY CALENDAR

1959

May 30, Saturday	Alumni Day
May 31, Sunday	Baccalaureate Exercises
June 1, Monday	Commencement
June 8, Monday	Registration for First Term, Summer Session
June 9, Tuesday	First Classes, First Term, Summer Session
July 4, Saturday	Independence Day, a holiday
July 17, Friday	Close of First Term, Summer Session
July 20, Monday	Registration for Second Term, Summer Session*
July 21, Tuesday	First Classes, Second Term, Summer Session
August 26, Wednesday	Close of Second Term, Summer Session
September 9, Wednesday, to September 15, Tuesday, inclusive ..	Freshman Week Program
September 14, Monday, and September 15, Tuesday	General Registration for First Semester
September 16, Wednesday	First Classes, First Semester
October 8, Thursday	English Proficiency Examination
October 13, Tuesday	Meeting of the University Senate
November 2, Monday	Mid-semester Reports Due
November 25, Wednesday, to November 29, Sunday, inclusive ..	Thanksgiving Recess
December 19, noon Saturday, to January 3, Sunday, inclusive	Christmas Recess

1960

January 16, Saturday	Last Classes, First Semester
January 18, Monday, to January 23, Saturday, inclusive	Final Examinations for First Semester
January 29, Friday, and January 30, Saturday	General Registration for Second Semester
February 1, Monday	First Classes, Second Semester
February 7, Sunday	West Virginia University Day
February 9, Tuesday	Meeting of the University Senate
February 25, Thursday	English Proficiency Examination
March 21, Monday	Mid-semester Reports Due
April 14, Thursday, to April 20, Wednesday, inclusive	Easter Recess
May 10, Tuesday	Meeting of the University Senate
May 21, Saturday	Last Classes, Second Semester
May 23, Monday, to May 28, Saturday, inclusive	Final Examinations for Second Semester
May 28, Saturday	Alumni Day
May 29, Sunday	Baccalaureate Exercises
May 30, Monday	Commencement

*Classes will be held on August 1 and August 15.

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WEST VIRGINIA UNIVERSITY

ESTABLISHED FEBRUARY 7, 1867

MORGANTOWN

The Board of Governors

	TERM EXPIRES
E. G. OTEY, <i>President</i> , Bluefield	1959
THOMAS L. HARRIS, <i>Vice-President</i> , Parkersburg	1960
K. DOUGLAS BOWERS, <i>Secretary</i> , Beckley	1962
A. C. SPURR, Wheeling	1961
FRANK J. ZSOLDOS, Pineville	1963
WILLIAM G. THOMPSON, Montgomery	1964
RAYMOND E. SALVATI, Huntington	1965
FORREST H. KIRKPATRICK, Wheeling	1966
JAMES H. SWADLEY, JR., Keyser	1967
ELVIS JACOB STAHR, JR., <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial, and business affairs of the University and Potomac State College of West Virginia University.

West Virginia University Bulletin

Series 59, No. 11-4, May, 1959

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Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

- ELVIS JACOB STAHR, JR., A.B., B.A. IN JURISPRUDENCE, M.A. (OXON.), B.C.L., LL.D.,
President of the University
EDWARD J. VAN LIERE, B.A., M.S., M.D., PH.D., LITT.D., F.A.C.P., *Dean and Professor*
of Physiology
BETTY BOYD, A.B., *Dean of Women*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENLR, B.A., *Comptroller and Director of Business Affairs*
J. EVERETT LONG, M.A., *Registrar of the University and Chairman of the Committee*
on Admissions
ROBERT FERGIJSON MUNN, M.A., *Director of the University Libraries*
HOWARD OLIVER CROASMUN, B.S., *Financial Secretary, Medical Center*
ALDERSON FRANCIS FRY, A.B., B.L.S., A.M., *Medical Center Librarian*
LYLE E. HEROD, A.B., M.S., *Assistant Registrar, Medical Center*

THE FACULTY

EMERITI

- SIMON B. CHANDLER, *Professor Emeritus of Gross Anatomy and Neuroanatomy*
GIDEON STANHOPE DODDS, *Professor Emeritus of Histology and Embryology*
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*

PROFESSORS

- EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920;
PH.D., University of Chicago, 1927; LITT.D., Medical College of Virginia, 1948;
F.A.C.P.
MILFORD LEROY HOBBS, *Professor and Chairman of Pathology and Clinical Pathology*
M.D., Washington University, 1931; Fellow, American College of Physicians; Fellow,
College of American Pathologists; Diplomate, American Board of Pathology.
ROBERT JOSEPH JOHNSON, *Professor and Chairman of Gross and Neurological Anatomy*
M.D., University of Iowa, 1943.
REGINAL FREDERICK KRAUSE, *Professor and Chairman of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; PH.D., University of Rochester,
1942; M.D., University of Vermont, 1951.
DAVID WILMARTH NORTHUP, *Professor and Chairman of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; PH.D., University
of Illinois, 1935.
JOHN MADISON SLACK, *Professor and Chairman of Microbiology and Public Hygiene*
A.B., M.S., PH.D., University of Minnesota, 1936, 1937, 1940.
JOHN CLIFFORD STICKNEY, *Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; PH.D., Univer-
sity of Minnesota, 1940.
DANIEL THOMAS WATTS, *Professor and Chairman of Pharmacology*
A.B., Elon College, 1937; PH.D., Duke University, 1942.
THOMAS WALLEY WILLIAMS, *Professor and Chairman of Microanatomy and Organology*
B.S., M.S., PH.D., University of Pittsburgh, 1934, 1937, 1939.

ASSOCIATE PROFESSORS

- CHARLES CHESTER BOYER, *Associate Professor of Gross and Neurological Anatomy*
B.S., St. Bonaventure, 1938; M.A., PH.D., Duke University, 1940, 1948.
WILLIAM AUGUST EHRCOTT, *Associate Professor of Pathology*
B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.
A. CURTIS HIGGINBOTHAM, *Associate Professor of Microscopic Anatomy and Organology*
B.S., PH.D., Northwestern University, 1935, 1939.

- JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
- GORDON R. MCKINNEY, *Associate Professor of Pharmacology*
A.B., DePauw University, 1946; M.S., University of Notre Dame, 1948; Ph.D., Duke University, 1951.
- CECIL BENJAMIN PRIDE,* *Associate Professor and Chairman of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923; F.A.C.S.
- RANDALL WILLIAM REYER, *Associate Professor of Microscopic Anatomy and Organology*
A.B., M.A., Cornell University, 1939, 1942; Ph.D., Yale University, 1947.
- LEROY HALLOWELL SAXE, *Associate Professor of Pharmacology*
B.S., Shippensburg (Pa.) State Teachers College, 1938; A.M., Ph.D., University of Pennsylvania, 1940, 1951.
- CLARK KENDALL SLEETH, *Associate Professor and Chairman of Medicine, Assistant to the Dean, and Physician, University Health Service.*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

ASSISTANT PROFESSORS

- WILLIAM JAMES CANADY, *Assistant Professor of Biochemistry*
B.S., Fordham University, 1946; M.S., Ph.D., George Washington University, 1950.
- JAMES E. DYSON, JR., *Assistant Professor of Microbiology*
B.S., Drake University, 1947; M.S., State University of Iowa, 1950; Ph.D., University of Michigan, 1954.
- EDWIN CHARLES GANGLOFF, *Assistant Professor of Biochemistry*
B.S., M.S., Ohio State University, 1945, 1947; Ph.D., Wayne University, 1955.
- JOHN BARKER HARLEY, *Assistant Professor of Pathology and Instructor in Medicine*
B.S., Dickinson College, 1943; M.D., University of Maryland, 1946.
- WILLIAM KNOX HARRELL, *Assistant Professor of Microbiology*
B.S., University of Arkansas, 1947; M.S., University of Oklahoma, 1949; Ph.D., University of Michigan, 1954.
- HUGH ALEXANDER LINDSAY, *Assistant Professor of Physiology*
B.Sc., M.Sc., University of Western Ontario, 1949; Ph.D., University of Toronto, 1955.
- FREDERICK JACKSON LOTSPEICH, *Assistant Professor of Biochemistry*
B.S., M.S., West Virginia University, 1948, 1952; Ph.D., Purdue University, 1955.
- BETHOLENE FRANCIS LOVE, *Assistant Professor of Pathology*
B.S., Western Reserve University, 1946; M.S., Oklahoma University, 1950.
- GEORGE RALPH MAXWELL,* *Assistant Professor of Medicine (Physical Diagnosis)*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923; F.A.C.P.
- ARCHIE LEMUEL STARKEY,* *Assistant Professor of Medicine (Physical Diagnosis), and Superintendent of Hopemont Sanitarium*
B.S., West Virginia University, 1925; M.D., University of Arkansas, 1937.
- FREDERICK RENDELL WHITTLESEY,* *Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925; F.A.C.P.
- STANLEY ARNOLD ZAILER, *Assistant Professor of Microbiology*
M.S., Ph.D., University of Chicago, 1950, 1952.

INSTRUCTORS

- THOMAS MARY GILFOIL, *Instructor in Physiology*
B.S., Hampden College of Pharmacy, 1952; M.S., University of Kansas City, 1954; Ph.D., University of Wisconsin, 1958.
- WILLIAM RUSSELL GOODGE, *Instructor in Gross and Neurological Anatomy*
B.S., Ph.D., University of Washington, 1949, 1957; M.A., University of Michigan, 1950.
- JOHN EDGAR HALL, *Instructor in Microbiology*
B.S., M.S., University of New Hampshire, 1951, 1953; Ph.D., Purdue University, 1958.

*Part-time. In private practice.

- EDGAR FRANK HEISKELL, JR.,* *Instructor in Surgery*
A.B., B.S., West Virginia University, 1938, 1940; M.D., Northwestern University, 1943.
- CARL EDWARD JOHNSON,* *Instructor in Medicine*
A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928; F.A.C.P.
- GEORGE H. NELSON,** *Instructor in Biochemistry*
M.S., Ph.D., *Medical College of South Carolina*, 1953, 1955.
- MAYNARD PRIDE,* *Instructor in Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve University, 1939.
- DARIS RAY SWINDLER, *Instructor in Gross and Neurological Anatomy*
A.B., West Virginia University, 1950; M.A., University of Pennsylvania, 1952.

CLINICAL INSTRUCTORS

- CONSTANTINE PEREYMA,* *Clinical Instructor in Gross and Neurological Anatomy*
D.D.S., M.D., University of Erlangen.
- HUBERT ADAMS SHAFFER,* *Clinical Instructor in Gross and Neurological Anatomy and Consulting Radiologist to the University Health Service*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.
- CLEMENT ART SMITH,* *Clinical Instructor in Gross and Neurological Anatomy*
A.B., Union College, 1934; M.D., Albany College, 1938.

ASSISTANTS

- ELIZABETH L. ARNETT, *Graduate Assistant in Pharmacology*
B.A., West Virginia University, 1957.
- RICHARD HERBERT BISHOP, *Graduate Assistant in Microbiology*
B.S., Hillsdale College, 1953.
- GILBERT F. FISHER, JR., *Research Assistant in Pharmacology*
B.S., West Virginia University, 1958.
- DONALD R. FOWLER, *Research Assistant in Pharmacology*
B.S., Washington and Lee University, 1958.
- ROBERT F. GUSTKE, *Graduate Assistant in Pharmacology*
B.S., West Virginia University, 1958.
- ROBERT KIRKWOOD HAMILTON, *Bacteriologist*
B.S., Fairmont State College, 1953; M.S., West Virginia University, 1957.
- FRANCES HEFRIN HIGGINBOTHAM, *Research Assistant in Microscopic Anatomy and Organology*
- DAVINE KIRBY HOLROYD, *Research Assistant in Pharmacology*
B.S., Concord College, 1952.
- RICCI JOE LARESE, *Graduate Assistant in Biochemistry*
A.B., Duke University, 1958.
- DANE WOOD MOORE, JR., *Research Assistant in Microbiology*
B.S., Alderson-Broaddus College, 1950; M.S., West Virginia University, 1957.
- HELEN MARY PAVLECH, *Assistant in Microbiology*
B.S., M.A., West Virginia University, 1938, 1950.
- JACK PUSHKIN, *Graduate Assistant in Pharmacology*
A.B., West Virginia University, 1958.
- ROBERT MARTIN RICHARDSON, *Graduate Assistant in Microbiology*
B.S., Marshall College, 1957.
- JOSEPH RICHARD VILSECK, *Graduate Assistant in Microbiology*
B.S., Waynesburg College, 1958.

LECTURERS

- ELDON BRYANT TUCKER,* *Lecturer in Pharmacology (Anesthesiology)*
B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.
- MICHAEL ANTHONY VIGGIANO,* *Lecturer in Public Hygiene*
B.S., A.M., West Virginia University, 1932, 1934; M.D., Rush Medical School, 1937; M.P.H., Johns Hopkins University, 1942.

*Part time. In private practice.

**Part time.

TECHNICIANS

- JEAN LYNN BARR, *Technician in Microbiology*
THEODORE LUCIAN BROWNE, *Technician in Physiology*
B.S., Hampton Institute, 1952.
- NANCY ADAIR GOOCH, *Technician in Microbiology*
A.B., West Virginia University, 1958.
- LOIS JOANNE KINLEY, *Technician in Biochemistry*
B.S., West Virginia University, 1956.
- WILLIS G. LEMLEY, *Laboratory Technician in Anatomy*
A.B., West Virginia University, 1942.
- THOMAS B. MCBEE, *Technician in Pharmacology*
- ANNE WAGONER SHARPE, *Technician in Pathology*
B.S., West Virginia University, 1956.
- M. KATHLEEN SIGLER, *Technician in Microanatomy and Organology*
B.S., Purdue University
- PHYLLIS VANNOY SPIKER, *Technician in Biochemistry*
B.S., West Virginia University, 1957.
- JEAN MARIE TETER, *Technician in Gross and Neurological Anatomy*
B.S., West Virginia University, 1947.

MEDICAL CENTER LIBRARY PERSONNEL

- MILDRED SHORTTRIDGE CLARK, *Reference Librarian*
A.B., M.S., West Virginia University, 1941.
- MARGARET JACO FORD, *Acquisitions Librarian*
B.S., B.A., Alderson-Broaddus College, 1940.
- BARBARA TURNER JUDY, *Cataloguing Assistant*
- BLANCHE HARMISON KUYKENDALL, *Circulation Librarian*

CLERICAL PERSONNEL

- SHIRLEY MAE ANGOTTI, *Clerk in Medical Center Finance Office*
- ANNA LOUISE BEAVERS, *Secretary in Administration and Physiology*
- MARY ELIZABETH BOWLBY, *Secretary in Medicine and Surgery*
- MARGARET BRODERICK, *Secretary in Pathology*
B.S., West Virginia University, 1946.
- PHYLLIS MORTON DEAN, *Secretary in Pathology*
- ELSIE MAE DINSMORE, *Secretary in Biochemistry and Pharmacology*
- EVELYN MCCLURE DUNCAN, *Secretary in Microbiology*
- JACQUELINE KAY FINDLAY, *Secretary in Gross and Neurological Anatomy and in Microanatomy and Organology*
- MILDRED FAIRFIELD FISHER, *Secretary to the Dean*
- MYRTLE LOU LANTZ, *Secretary to the Assistant Registrar*
- DEMARIS BERRY SMITH, *Clerk in Assistant Registrar's Office*

THE UNIVERSITY HEALTH SERVICE

PHYSICIANS

- JOHN JOSEPH LAWLESS, *Director of University Health Service and Associate Professor of Medicine*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931, 1934; M.D., Rush Medical College, 1939.
- EDGAR FRANK HEISKILL, JR.,* *Assistant Physician and Instructor in Surgery*
A.B., B.S., West Virginia University, 1939, 1940; M.D., Northwestern University, 1943.
- JOHN WILLIAM HESEN, *Physician, University Health Service and Team Physician*
A.B., B.S., West Virginia University, 1933, 1948; M.D., Medical College of Virginia, 1950.
- REGINALD FREDERICK KRAUSE, *Physician (part-time) and Professor of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; Ph.D., University of Rochester, 1942; M.D., University of Vermont, 1951.

*Part-time. In private practice.

FREDERICK R. MCKEEHAN, *Physician, University Health Service*

A.B., M.D., University of Rochester, 1946, 1950.

HUBERT ADAMS SHAFFER,* *Consulting Radiologist, University Health Service and Clinical Instructor in Gross and Neurological Anatomy*

B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.

CLARK KENDALL SLEETH, *Physician, University Health Service and Associate Professor of Medicine*

A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.

BENJAMIN MORTIMER STOUT, JR.,* *Physician, University Health Service*

A.B., West Virginia University, 1948; M.D., Jefferson Medical College, 1952.

NURSES

PATRICIA ANN BELL, R.N.

BERNETTIE PENNINGTON GNEGY, R.N.

HELEN LOUISE KUDLA, R.N.

DOROTHY ANN MERO, R.N.

MARTHA LORENE MORRIS, R.N.

MARGARET ANN YAREBOUGH, R.N.

TECHNICIANS

CHESSLA A. GILMORE, *Technician, University Health Service*

FABRY LIVINGSTONE HAWK, *Assistant Director, Student Health Laboratory*

CLERICAL STAFF

ETHEL FEATHER ELLIS, *Receptionist, University Health Service*

THELMA ROSE VANYO, *Clerk, University Health Service*

MARGARET ANNE WALTER, *Secretary, University Health Service*

STANDING COMMITTEES

Admissions and Scholarship: C. K. SLEETH (Chairman), M. L. HOBBS, R. F. KRAUSE, W. K. HARRELL, R. J. JOHNSON, A. C. HIGGINBOTHAM, and LYLE E. HEROD.

Clinical and Special Facilities: C. K. SLEETH (Chairman), C. B. PRIDE, MAYNARD PRIDE, G. RALPH MAXWELL, M. L. HOBBS, CARL E. JOHNSON, J. B. HARLEY, and W. A. EHRGOTT.

Student Loans and Scholarships: J. CLIFFORD STICKNEY (Chairman), F. J. LOTSPEICH, T. WALLEY WILLIAMS, W. R. GOODGE, and C. C. BOYER.

Medical Technology: M. L. HOBBS (Chairman), F. J. LOTSPEICH, W. A. EHRGOTT, W. K. HARRELL, B. F. LOVE, LYLE E. HEROD, and D. W. NORTHUP.

Building Committee: J. M. SLACK (Chairman), M. L. HOBBS, R. F. KRAUSE, J. J. LAWLESS, C. K. SLEETH, J. C. STICKNEY, E. J. VAN LIERE, and T. W. WILLIAMS.

Curriculum: C. K. SLEETH (Chairman), J. B. HARLEY, W. K. HARRELL, R. J. JOHNSON, R. F. KRAUSE, and E. J. VAN LIERE.

*Part-time. In private practice.

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in preclinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene, and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

The present School of Medicine had its beginning in 1912. Since that date it has given the first two years of the medical curriculum with no provision for students to transfer to any special school for the completion of their work until 1943, when an agreement was made with the Medical College of Virginia.

MEDICAL CURRICULUM

FIRST AND SECOND YEARS

The School of Medicine now gives only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of the American Medical Association. It is also a member of the Association of American Medical Colleges. Inasmuch as only the first two years are given at West Virginia University, students must go elsewhere for the completion of the work for the M.D. degree. There are two possibilities as noted below.

THIRD AND FOURTH YEARS

The Medical College of Virginia. There is an agreement in operation with the Medical College of Virginia at Richmond for the transfer of as many as twenty-five students upon the completion of their second year at West Virginia University. At the Medical College of Virginia these students pay the same tuition as do residents of Virginia. Diplomas conferring the M.D. Degree are issued jointly by the two schools. The benefits of this agreement are available only to students who at the time of entering the medical curriculum had been residents of West Virginia for at least five years.

Other Medical Schools. In each class there are also some students who, by arrangement, transfer to other medical schools of their own choice for the completion of the work.

EXPANSION OF THE SCHOOL OF MEDICINE

The West Virginia Legislature has made provision for the establishment of a four-year School of Medicine as well as schools of Dentistry and Nursing. This means that an increased number of students will be accepted and that the M.D. degree will be granted in the near future.

The Basic Sciences Building which houses the pre-clinical departments of the School of Medicine has been occupied since the fall of 1957. The Teaching Hospital is under construction, and after it is completed it will be possible for the University to confer the M.D. Degree.

BUILDINGS AND EQUIPMENT

BASIC SCIENCES BUILDING

The School of Medicine moved into the Basic Sciences Building of the Medical Center in the Summer of 1957. This building consists of a central core containing lecture rooms, laboratories, and other teaching facilities, to which are attached five wings. The core, measuring 225 by 225 feet, is five stories high, with the wings extended an additional 100 feet to the north, east, and west.

Located on the second, third, and fourth floors of this central area are facilities for teaching anatomy, bacteriology, biochemistry, medicine, pathology, pharmacology, physiology, public health and preventive medicine, and surgery. The School of Dentistry occupies the first floor, while the fifth floor contains mechanical equipment. The wings house the administrative offices, the Medical Library, a 500 seat auditorium and such student facilities as lounge, locker rooms, book store, snack bar, cafeteria and post office. The Schools of Nursing and Pharmacy will be housed in one wing.

MEDICAL CENTER LIBRARY

The Library is located on the second floor of the Administrative Wing, with a stack-well extending from the basement up through the center of the Library. With 20,000 square feet of floor space, exclusive of stacks, it will seat 300 students, house 160,000 volumes, and provide for all auxiliary services. On hand are 38,000 volumes of which two-thirds are periodicals. In the current periodical room about 700 foreign and domestic periodicals are on display. Fourteen sound-proof rooms give space for small group study. There are also a conference room, history of medicine room, and space for microfilm, photostat, and films.

On hand is all the needed material for basic science courses, with excellent representation in the clinical field, to be expanded as the courses progress. While most of the material is in English, there are outstanding periodicals and books in the major foreign languages. The History collection is being expanded to include good holdings in the secondary material, as well as outstanding original material. This collection is augmented with the holdings of the General University Library and the specialized chemistry library in the Chemistry Building on the main campus.

Associated with each department is a Seminar Room planned to include a small relevant working library. The Department of Microbiology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

Material not available in this library may be obtained through interlibrary loan from adjacent and large medical libraries throughout the country.

CLINICAL AND SPECIAL FACILITIES

The following institutions and agencies are co-ordinated effectively for the clinical needs of the School of Medicine.

Hopemont Sanitarium, at Hopemont, West Virginia, is approved by the American Medical Association for residency. It has approximately 400 beds primarily for pulmonary diseases, but a number of beds are set aside for other medical and surgical cases. The School of Medicine has access to this hospital for teaching purposes and the Superintendent and certain members of the staff are also members of the University staff. This arrangement provides an affiliation for instruction in clinical examination of patients.

Monongalia General Hospital and Vincent Pallotti Hospital, two local general hospitals with bed capacities of approximately 160 and 100 respectively, make their facilities available to the School of Medicine for teaching purposes by special arrangement between their administrative officers and the school.

Intramural Clinics. With the cooperation of members of the local medical profession, ambulatory cases are available for examination and demonstration.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from the Vincent Pallotti Hospital, Monongalia General Hospital, Hopemont Sanitarium, and the private practice of physicians of the area. This arrangement provides about 200 autopsies per year, and affords opportunity for teaching in gross pathology.

ORGANIZATIONS AND LECTURESHIPS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally. The Alumni Association has recently established an annual lectureship.

JOHN NATHAN SIMPSON LECTURESHIP

In 1933 the West Virginia chapter of Phi Beta Pi medical fraternity instituted the John Nathan Simpson Lectureship, honoring John N. Simpson, first dean of the School of Medicine. An annual lecture is given by someone distinguished in medical research or practice.

GIDEON STANHOPE DODDS LECTURESHIP

Some years ago a group of interested alumni contributed a fund for securing a portrait of Dr. Dodds, long time professor of histology and embryology. Contributions were sufficiently generous that a substantial balance remained after paying for the portrait.

The income from this fund is now being used to bring to the campus, periodically, some outstanding worker in the field of microscopic anatomy or embryology.

JACOB SCHWINN MEMORIAL LECTURESHIP

The Jacob Schwinn Study Club of Wheeling, West Virginia, has established a fund to support an annual lecture at the School of Medicine, to be known as the Jacob Schwinn Memorial Lecture.

EXPENSES; HOUSING; FINANCIAL AID

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. For information concerning tuition and other fees, see page 13. The total legitimate cost of a nine-month session for medical students will range from \$1,100 to \$1,600 exclusive of traveling expenses.

LIVING ACCOMMODATIONS

Medical students, as a rule, must find board and lodging in private dwellings in Morgantown, where the rates for accommodations suitable for medical students are usually somewhat higher than in the University dormitories. It is suggested that women contact the Office of the Dean of Women for information concerning off-campus housing. Men may obtain such information from the Information Desk in the Administration Building. All arrangements with the landlady or landlord must be made personally by the student.

LOANS AND PART-TIME EMPLOYMENT

It frequently happens that students otherwise well qualified for the study of medicine are short of funds to defray necessary expenses. For the assistance of such students certain loans are available, some specifically for medical students, and others are available to students of all colleges in the University. For information about loans, inquiries should be made to Joseph C. Gluck, Director of Student Affairs, West Virginia University.

The West Virginia State Medical Association has established a fund from which there will be granted \$1,000 each year to a deserving student in each class of the School of Medicine. Each recipient of such an award agrees to practice in a rural area of West Virginia for a period of time following the completion of his education. Information is available from the office of the Dean of the School of Medicine.

A few part-time jobs are available on the campus and in the School of Medicine. Inquiries concerning these may be made to the University Placement Service or to the School of Medicine.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions and Scholarship of the School of Medicine, composed of members of the medical faculty and the office of the Registrar. Admission is by recommendation of this committee and with the approval of the Dean of the School.

WHEN TO APPLY FOR ADMISSION

Application for admission in September, 1960, should be made promptly upon completion of the 1958-59 school year (June, 1959). The latest date for filing an application for September, 1960, is December 1, 1959.

HOW TO APPLY FOR ADMISSION

Application for admission must be made upon blanks which may be obtained from the Assistant Registrar, Medical Center. An unmounted photograph, 2 by 2½ inches in size, must accompany the completed application when it is submitted to the Assistant Registrar, Medical Center, West Virginia University, Morgantown, W. Va.

CREDENTIALS

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the Assistant Registrar, Medical Center, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Work subsequently completed should be reported promptly to the Assistant Registrar, Medical Center.

RE-APPLICATIONS

Any applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

COLLEGE CREDITS REQUIRED

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which have been approved for premedical education by appropriate agencies.

Applicants from other colleges will receive consideration based upon the merits of the individual case.

Credits submitted by applicants for work done elsewhere than at West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The applicant should present a broad general education including, whenever possible, a major in some field, not necessarily a natural science. The Committee on Admissions needs evidence of excellence of academic performance and steady progress toward a goal. An excess of credit hours or higher degrees does little to offset the disadvantage of low grades in securing admission to medical schools. The practice of repeating courses to raise the grade is discouraged. Applicants who have been subject to suspension from this or other medical schools can be admitted only in very exceptional cases and at the discretion of the Committee on Admissions and Scholarship.

The requirements outlined below may be met in either of two ways: First and preferably, by pursuing a course of study leading toward a Bachelor's degree with major and minor fields of the applicant's own choosing, or secondly, by following a more rigidly prescribed curriculum generally offered as a "Pre-Medical" curriculum. In either case the applicant must have completed satisfactorily the minimum requirements listed below.

The applicant must present credit from a college of recognized standing for at least 90 semester hours of work exclusive of military science and physical education. These credits must include the following minimum requirements:

<i>English Composition and Rhetoric</i>	6 hr.
<i>Biological Sciences</i>	12 hr.
Should include 8 hours of General Zoology or 8 hours of General Biology. Comparative Vertebrate Anatomy is desirable, Vertebrate Embryology is suggested.	
<i>Chemistry</i>	16 hr.
Must include inorganic chemistry and organic chemistry (aliphatic and aromatic.)	
<i>Physics</i>	8 hr.
<i>Psychology</i>	3 hr.
Two years of modern foreign language is suggested.	

MEDICAL COLLEGE ADMISSION TEST

The score on this test is used as one criterion of suitability for admission. The test is sponsored by the Association of American Medical Colleges and is given by the Educational Testing Service, 20 Nassau Street, Princeton, New Jersey. Tests are conducted at various centers in the Spring and Fall of each year. It is of advantage to applicants to take the test in the Spring, as many acceptances are issued before the fall test scores are available. Application to take this test must be made more than a month in advance, and students should consult their advisers about this matter at the beginning of the semester or quarter during which the test is to be taken. Information may also be obtained directly from the Testing Service listed above.

PERSONAL ATTRIBUTES

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of entrance to the School of Medicine. Good health is a necessary qualification.

RECOMMENDATIONS

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, one instructor in each of the departments of biology, physics, and chemistry to send a letter of recommendation to the Assistant Registrar, Medical Center.

NOTIFICATION OF APPLICANTS

All applicants will be informed of the action of the Committee on Admissions and Scholarship as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in October or November.

ADVANCE DEPOSIT FEE

Each applicant is required to deposit \$25 before his name is entered upon the official list of those accepted for admission to the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If the applicant fails to enter the School of Medicine this deposit fee is forfeited by the applicant.

GENERAL RULES OF THE SCHOOL OF MEDICINE

REGISTRATION

All medical students are expected to register at the Medical Center on the days set apart for registration at the beginning of each semester. These dates are given in the University Calendar on page I.

No student will be permitted to register in the School of Medicine after the first week of classes.

Students in other colleges, schools, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses

and must receive permission from the Committee on Admissions and Scholarship and the professor in charge of the course.

TUITION AND OTHER FEES

All University fees are subject to change without notice.

All fees are due and payable at the Office of the Comptroller, Medical Center, on the days¹ of registration.

Tuition Fees

	<i>Resident²</i>	<i>Nonresident²</i>
University fee (per semester)	\$133.00†	\$351.00†
Total per academic year	266.00	702.00
Part-time Students (per semester hour)	8.00	26.00

Laboratory Fees and Deposits

Breakage Deposit	10.00	10.00
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Special Fees

Registration Fee (per semester)	50.00*	50.00*
Registration Fee (per semester hour)	4.00**	4.00**
Late Registration Fee	2.00	2.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

Laboratory fee for University students not regularly enrolled in the School of Medicine: for one laboratory course, \$5.00, and for more than one laboratory course, \$10.00.

Microscopes may be rented from the Book Store at a cost of \$20.00 per semester.

†These fees are required of all full-time students enrolled in the University. "University Fee" includes: Mountainlair Fee—\$2.00; Student Activity Fee—\$8.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

*New registration fee, imposed by law, effective June, 1959.

**New registration fee (for part-time students), imposed by law, effective June, 1959.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the School of Medicine during the semester should do so in the regular manner. Consult the office of the Assistant Registrar, Medical Center for instructions as to withdrawal.

¹Students who have not paid their fees before the close of office hours on the second Saturday following the opening of a semester or a summer term shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn. The second Saturday following the opening of a semester is the end of the first refund period. The second Saturday following the opening of a Summer term is the end of the refund period.

²No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction or exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

EXAMINATIONS

It is the policy of the various departments of the School of Medicine to conduct examinations from time to time in order that both faculty and students may be kept aware of the individual student's progress. A formal final examination is conducted at the end of each course.

In addition to these departmental examinations, which help serve as a basis for recording grades in various subjects, other examinations may be conducted at times for other purposes. At the end of the first year a comprehensive examination, designed by the entire faculty and intended to serve as a measure of adequacy of curriculum coverage, may be required. It is to be emphasized that this examination will not be used to determine a student's grade in any course or courses.

After the end of the second year, the students may be required to take Part I of the National Board of Medical Examiners Examination, which is usually given in mid-June. Since this is a school requirement, it will be without cost to the student. However, if the student wishes to utilize his score on this examination as part of his performance for certification by the National Board of Medical Examiners, he can arrange to do so by the payment of an additional fee direct to that Board. More complete information may be obtained in the office of the Dean of the School of Medicine.

PROMOTIONS AND SUSPENSIONS

The Committee on Admissions and Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Committee on Admissions and Scholarship.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second year until all courses for the first year have been successfully completed.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I" is not removed before the end of the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Admissions and Scholarship (University Rule).

For medical students the following schedule is established: Incomplete courses for the first semester should be completed by examinations or other specified work not later than the week immediately following Easter vacation of the same academic year.

Incomplete courses for the second semester of the first year should be completed not later than the first day of registration in the following September, in order that the eligibility of the student to enter the second year may be determined.

Completion of courses during the second semester of the second year shall be upon a schedule determined by agreement between the instructor concerned and the Committee on Admissions and Scholarship.

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Committee on Admissions and Scholarship of the School of Medicine. This permission is not valid until it has been reported to the Assistant Registrar, Medical Center for record.

PROFICIENCY IN ENGLISH

The School of Medicine, in compliance with a recommendation of the University Senate, has adopted the following requirement:

"Each undergraduate must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take this examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary."

This examination will be given by an English Proficiency Board named by the President of the University.

This regulation applies to all students who begin their work after June 1, 1952. Students who have not previously satisfied this requirement must take this examination in their first semester of registration in the School of Medicine.

DEGREES

The School of Medicine gives no degree in medicine except in cooperation with the Medical College of Virginia as noted on page 8.

Upon completion of the second year in the School of Medicine, students receive the *Bachelor of Science* Degree. At the end of the first year, those students who have met certain requirements of the College of Arts and Sciences in West Virginia University receive the *Bachelor of Arts* Degree.

The degree of *Doctor of Medicine* will be granted by the University following the completion of clinical facilities now under construction. The class entering the School of Medicine in the fall of 1959 should be eligible to receive this degree in the spring of 1963.

The *Master of Science* Degree is offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. For complete information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements* of the Graduate School.

Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

CURRICULUM REVISION

The curriculum of the School of Medicine is constantly under study by a special committee and by all members of the faculty. In the interests of offering the best possible course of instruction, curriculum revisions are made from time to time.

COURSES OF INSTRUCTION

NOTE--Courses marked "*" are required of first-year students; those marked "+" are required of second-year students.

The following abbreviations are used:

- I—a course given in the first semester.
- II—a course given in the second semester.
- I, II—a course given in each semester.
- Yr.—a continuous course extending through two semesters.
- S—a course given in the Summer Session.
- hr.—number of credit hours per course.

For convenience each course is designated by the name of the department offering the courses and the number of the course. The plan for numbering courses at West Virginia University is as follows:

- Courses 1 to 99—offered primarily for freshmen and sophomores
- Courses 100 to 199—offered primarily for juniors and seniors
- Courses 200 to 299—advanced courses for juniors, seniors, and graduates
- Courses 300 to 399—offered to graduates only

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information, see *Announcements of the Graduate School*.

BIOCHEMISTRY

Professor KRAUSE; Assistant Professors GANGLOFF, LOTSPICH, and CANADY; Instructor NELSON.

139. GENERAL BIOCHEMISTRY. I. 4 hr. PR: Inorganic and organic chemistry. Quantitative analysis desirable. For students in Home Economics. Open to other qualified students.
230. APPLIED BIOCHEMISTRY. S. 2 hr. PR: Inorganic and organic chemistry. Primarily for high-school teachers. Not for graduate chemistry majors. An introduction to some of the practical chemical reactions which are carried out by living organisms with special reference to man.
- 231.* MEDICAL BIOCHEMISTRY. I. 7 hr. PR: Chemistry 233, 238 (Organic Chemistry). Lect. 4 hr. per week; lab. 8 hr.
- 237, 238. SEMINAR IN BIOCHEMISTRY. I, II. 1 hr. per semester. PR or Conc.: Biochem. 231. Presentation and discussion of special topics.
239. CLINICAL BIOCHEMICAL TECHNIQUES. II. 4 hr. PR: General or Medical Biochemistry. Primarily for students in Medical Technology. Open to other qualified students. Primarily a laboratory course designed to study chemical techniques used in clinical laboratories.
- 330, 331. BIOCHEMICAL PREPARATIONS. I, II. 2-5 hr. Arranged. PR: Biochem. 231 or equivalent. Emphasis on biochemical methods.
332. ENZYME KINETICS. II. 1 hr. PR: General or medical biochemistry. Primarily for graduate students or other properly qualified students. An introduction to the physical mechanisms of enzyme action.
- 333, 334, 335, 336. RESEARCH IN BIOCHEMISTRY. I, II, S. 1-6 hr. Arranged. PR: Biochem. 231 or equiv.

GROSS AND NEUROLOGICAL ANATOMY

Professor JOHNSON; Associate Professor BOYER; Instructors GOODGE and SWINDLER; Clinical Instructors PEREYMA, SHAFFER, and SMITH.

- 201.* GROSS ANATOMY. I. 6 hr. PR: Gen. Zool. Comparative anatomy and embryology desirable. The gross anatomy of the human body studied by a complete dissection. Consideration is given to the embryologic explanation of variations and anomalies. Roentgenographic anatomy is included. Lect. 3 hr. per week; lab. 6 hr.
- 202.* GROSS ANATOMY. II. 6 hr. PR: Anat. 201. Continuation of Anat. 201. Lect. 3 hr. per week; lab. 10 hr.
- 203.* NEUROANATOMY. II. 4 hr. PR: Anat. 201. The gross and microscopic structure of the central nervous system with a consideration of its functional anatomy, embryology, and the more important types of maldevelopment. Lect. 2 hr. per week; lab. 4 hr.

MEDICINE

Associate Professors SLEETH and LAWLESS; Assistant Professors MAXWELL, WHITTLESEY, and STARKEY; Instructors JOHNSON and HARLEY.

- 275.† HISTORY OF MEDICINE. I. 1 hr. A brief history of the development of the science and art of medicine. Lect. 1 hr. per week.

- 277.* CORRELATION CLINIC. I. 1 hr. Practical demonstrations of the relation of the basic sciences to clinical medicine using the case method. Members of the various basic science departments participate along with the Department of Medicine.
- 278.* CORRELATION CLINIC. II. 1 hr. A continuation of Medicine 277.
- 291.† PHYSICAL DIAGNOSIS. I. 2 hr. Lecture and demonstration of the technique of taking clinical histories and performing physical examinations.
- 292.† PHYSICAL DIAGNOSIS. II. 1 hr. Practical experience in examination of normal and abnormal subjects.
- 293.† INTRODUCTORY MEDICINE. I. 1 hr. Lectures and demonstrations of patients exhibiting the cardinal manifestations of disease and specific disease entities.
- 294.† INTRODUCTORY MEDICINE. I. 1 hr. A continuation of Medicine 293. Includes an introduction to principles of Pediatrics.

MICROBIOLOGY AND PUBLIC HYGIENE

Professor SLACK; Assistant Professors HARRELL, DYSON, and ZAHLER; Instructor HALL; Lecturer VIGGIANO; Assistant PAVLECH.

- 218.† MEDICAL PARASITOLOGY. II. 2 hr. PR: Consent. Introduction to animal organisms as human pathogens and vectors of disease. Lect. 1 hr., lab. 2 hr. per week.
220. PATHOGENIC MICROBIOLOGY FOR PHARMACY STUDENTS. II, S. 5 hr. PR or Conc: Chem. 233 (organic). A detailed study of pathogenic micro-organisms with emphasis on material important to Pharmacy. Lect. 3 hr., lab. 6 hr. per week. Graduate students required to do 1 hr. additional work per week for 3 hr. credit.
- 221.† MEDICAL MICROBIOLOGY. I. 6 hr. PR or Conc: Chem. 233, 238 (organic), Med. Biochem. 231 desirable. Detailed study of the pathogenic micro-organisms, including morphology, physiology, identification and mechanisms of disease production, as well as response of body to bacterial diseases. Lect. 3 hr., lab. 9 hr. per week.
- 222.† PUBLIC HYGIENE. II. 2 hr. PR: Consent. Introduction to principles of public health. Lect. 2 hr. per week.
223. PATHOGENIC MICROBIOLOGY FOR MEDICAL TECHNOLOGY STUDENTS. II, S. 5 hr. PR or Conc: Chem. 131 (organic). A detailed study of pathogenic micro-organisms with emphasis on material important to Medical Technology. Lect., 3 hr., lab. 6 hr. per week. Graduate students required to do 1 hr. additional work per week for 5 hr. credit.
224. MEDICAL PARASITOLOGY FOR MEDICAL TECHNOLOGY STUDENTS. II. 4 hr. PR: Consent. Study of animal parasites and vectors of disease with emphasis on laboratory methods. Lect. 3 hr., lab. 3 hr. per week.
- 226, 227. SPECIAL PROBLEMS IN MICROBIOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Microbiol. 221 or equiv.
228. DIAGNOSTIC MICROBIOLOGY. I, II, S. 3 hr. Hours to be arranged. PR: Microbiol. 221 or equiv. Application of cultural, serological and animal methods as aids to the diagnosis of human diseases.
229. DETERMINATION MICROBIOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Microbiol. 221 or equiv. Use of morphological, physiological, and immunological methods for the identification of micro-organisms.
- 320, 321. ADVANCED MICROBIOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Microbiol. 221 or equiv. and graduate standing. Advanced theoretical and practical studies in the fields of bacterial physiology, immunology, fungi, rickettsiae, and viruses.
- 323, 324, 325, 326. RESEARCH IN MICROBIOLOGY. I, II, S. 1-6 hr. per sem. Hours to be arranged. PR: Microbiol. 221, 320, or equiv.

MICROANATOMY AND ORGANOLOGY

Professor WILLIAMS; Associate Professors HIGGINBOTHAM and REYER.

- 205.* MICROANATOMY AND ORGANOLOGY. I. 6 hr. PR: Zool. 1, 2 or equiv. The minute anatomy and functional aspects of tissues and organs, with brief reviews of their embryonic development. Lect. 3 hr., lab. 6 hr. per week.
206. SPECIAL PROBLEMS IN MICROANATOMY. II. 2-4 hr. PR: Microanat. 205, 209, or equiv.
208. EXPERIMENTAL EMBRYOLOGY. II. 3 hr. PR: Consent, Biochem., Embryol., and Microanat. 205 or 209 or equiv. A lecture and laboratory course in the experimental analysis of development. Different aspects of the initiation of development, early morphogenesis, differentiation, growth, regeneration and the origin of congenital anomalies will be considered.

OBSTETRICS

Professor VAN LIEFE.

- 296.† OBSTETRICS. II. 2 hr. PR: Anat. 201, 202 (Human anatomy). Physiol. 241, Pathol. 251. An introductory course in obstetrics. Lect. 2 hr. per week.

PATHOLOGY

Professor HOBBS; Associate Professor EHROTT; Assistant Professors HARLEY and LOVE.

150. ELEMENTARY HISTOLOGY. I. 3 hr. A study of the elements of histological structure, including blood. Lect. 2 hr. per week; lab. 3 hr. Required of students in Medical Technology. Other students as approved by the department.
151. CLINICAL LABORATORY DIAGNOSTIC METHODS. II. 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Lect. 2 hr. per week; lab. 6 hr. Required of students in Medical Technology. Other students as approved by department.
- 251.† GENERAL AND TUMOR PATHOLOGY. I. 6 hr. PR: approval of department head. Includes both gross and microscopic studies with demonstrations. Lect. 4 hr. per week, lab., 10 hr.
- 252.† SPECIAL PATHOLOGY. II. 2 hr. PR: approval of department head. A study of special diseases with gross and microscopic specimens from selected autopsies. Lect. 1 hr., lab. 2 hr. per week.
- 254.† CLINICAL PATHOLOGY. II. 3 hr. PR: approval of department head. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lect. 2 hr. per week, lab. 6 hr.
256. ADVANCED PATHOLOGY. I or II. 3 hr. PR: Pathology 251. Microscopic and gross specimens from selected autopsies. Open to properly qualified students.
351. EXPERIMENTAL PATHOLOGY. I or II. 2-5 hr. Hours to be arranged. Open to properly qualified students.

PHARMACOLOGY

Professors WATTS; Associate Professors MCKINNEY and SAXE; Lecturer TUCKER.

160. FUNDAMENTALS OF PHARMACOLOGY. I. 5 hr. PR: Physiol. 141. For students in the School of Pharmacy. Lect. 4 hr., lab 3 hr. per week.
- 262.† MEDICAL PHARMACOLOGY. II. 6 hr. PR: Physiol. 141 or 241. Origin, chemistry, pharmacodynamics, toxicology, therapeutic use, and dosage of drugs commonly used in man and animals with emphasis on the fundamental mechanisms of drug action. Lect. 5 hr., lab. 6 hr. per week.
266. BIOCHEMORPHOLOGY. II. 2 hr. PR: Pharmacol. 262, or Chem. 238 or 277. Relation between chemical constitution and physiological action of medical agents. Lecture.

- 360, 361. BIOASSAY AND COMPARATIVE PHARMACOLOGY. I, II, S. 3 hr. per sem. PR: Pharmacol. 262, or Chem. 238 or 277 and Microanat. 205, or Pharmacy 110. Cellular pharmacodynamics and comparative mammalian pharmacology. Species differences in response to drugs. Development of technique in bioassays employed for control by the pharmaceutical industry.
- 362, 363. ADVANCED PHARMACOLOGY. I, II, S. 2-5 hr. per sem. Hours to be arranged. PR: Pharmacol. 360. Rational investigation of new drugs and comparison with presently used clinic drugs.
364. TOXICOLOGY. I, II, S. 1 hr. PR: graduate status in pharmacology or chemistry. Toxic effects of industrial chemicals and drugs. Allowable concentrations in industry, and antidotal measures.
365. SEMINAR IN PHARMACOLOGY. I, II, 1 hr. per sem. PR or Conc: Pharmacol. 262 or graduate status in basic medical sciences. Presentation and discussion of special material.
- 366, 367, 368, 369. RESEARCH IN PHARMACOLOGY. I, II, S. 1-6 hr. per sem. PR: graduate status in physiology, chemistry, or agriculture. Determination of biological activity or toxicity of chemicals that may be used for drugs, solvents, insecticides, or poisons.

PHYSIOLOGY

Professors NORTHUP, VAN LIERE, and STICKNEY; Assistant Professor LINDSAY; Instructor GILFOIL.

141. ELEMENTARY PHYSIOLOGY. I. 4 hr. PR: Biol. 1, 2 or Zool. I, 2; PR or Conc: Chem. 131 (organic chem.). For students in Pharmacy and Medical Technology. Lect. 3 hr., lab. 3 hr. per week.
- 241.* PHYSIOLOGY. II. 9 hr. PR: Zool. 231 (comparative anatomy), Biochem. 231. Physiology for medical students. Lect. 7 hr., lab. 8 hr. per week.
243. PHYSIOLOGY. I. 6 hr. PR: Zool. 1, 2, organic chem. Human physiology, intermediate level.
- 244, 245. SPECIAL TOPICS. Yr. 2-5 hr. PR: Physiol. 241.
246. SEMINAR IN PHYSIOLOGY. No credit.
- 340, 341. ADVANCED PHYSIOLOGY OF CIRCULATION AND RESPIRATION. Yr. 2-5 hr. Hours to be arranged. PR: Physiol. 241. Historical review, advanced topics, and latest developments in physiology of circulation and respiration.
342. PHYSIOLOGY OF GASTRO-INTESTINAL SYSTEM, II, S. 2-5 hr. Hours to be arranged. PR: Physiol. 241. Historical review, advanced topics and latest developments in physiology of the digestive tract.
- 343, 344. NERVOUS PHYSIOLOGY AND SPECIAL SENSES. Yr. 2-4 hr. Hours to be arranged. PR: Physiol. 241, Psych. 1 or Neuroanat. 203. Historical review, advanced topics, and latest developments in physiology of the nervous system and the organs of special sense.
345. ENDOCRINOLOGY. I, S. 2-5 hr. Hours to be arranged. PR: Physiol. 243. Historical review, advanced topics, and latest developments in physiology of the endocrines.
- 346, 347, 348, 349. RESEARCH IN PHYSIOLOGY. Yr. 1-6 hr.

SURGERY

Associate Professor C. B. PRIDE; Instructors M. PRIDE and HEISKELL; members of the DEPARTMENT OF ANATOMY.

- 281.† PRINCIPLES OF SURGERY. I. 1 hr. Lectures and demonstrations of the fundamental principles of surgery. 2 hr. per week.

282.† PRINCIPLES OF SURGERY AND SURGICAL ANATOMY. 11. 2 hr. Demonstrations of operative techniques; lectures and demonstrations of the importance of anatomy to clinical surgery. 2 hr. per week.

II. Curriculum in Medical Technology

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology and Clinical Pathology), Chairman
W. A. EHRCOTT (Associate Professor of Pathology)
W. K. HARRELL (Assistant Professor of Microbiology)
F. J. LOISPEICH (Assistant Professor of Biochemistry)
B. F. LOVE, (Technical Director of Curriculum in Medical Technology)
D. W. NORTHUP (Professor and Head of Physiology)
LYLE E. HEROD (Assistant Registrar, Medical Center)

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as medical technologists in hospitals, clinics, research laboratories, and in private and public health laboratories.

Training standards for medical technologists are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association. Properly qualified graduates, upon passing the required examinations, may be eligible for certification by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

The technical training in Medical Technology, leading to the Bachelor of Science Degree, requires two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

REQUIREMENTS FOR ADMISSION

For admission to the curriculum in Medical Technology, the applicant must have graduated from high school and present at least 15 units of high school work acceptable to the University, including one unit in elementary algebra and one unit in plane geometry.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 hours, exclusive of military science, as specified below:

English, 12 semester hours. (Must include 6 hours composition and rhetoric and 6 additional hours in literature.)

Modern Foreign Language, 12 hours.

Biological Science, 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry, 16 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 4 hours; Organic Chemistry, 4 hours.)

Physics, 8 hours.

Physical Education. 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Electives to complete the required hours. Electives should be in fields not covered in the required subjects. Algebra is strongly recommended. Student should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry and comparative anatomy.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms which may be obtained from the Assistant Registrar, Medical Center. Application should be made in February of the second pre-technology year. When applying, unless he is in residence at West Virginia University, the student should request the registrar of his college to send an official transcript of his work to the Assistant Registrar, Medical Center.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the School of Medicine. Notification will be sent after April 1.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in selecting students. Applicants from institutions other than West Virginia University should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

TUITION AND OTHER FEES

All University Fees are subject to change without notice. Students in Medical Technology pay the following fees in their junior and senior years. All fees are due and payable at the Office of the Comptroller, Medical Center, on the days of registration.³

Tuition Fees

	<i>Resident⁴</i>	<i>Nonresident⁴</i>
University Fee (per semester)	\$ 71.00*	\$246.00†
Total per academic year	142.00	492.00
Summer (per semester hour) ⁵	4.00	8.00

†These fees are required of all full-time students enrolled in the University. "University Fee" includes: Mountainlair Fee—\$2.00; Student Activity Fee—\$8.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

³Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester or a summer term shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn. The second Saturday following the opening of a semester is the end of the first refund period. The second Saturday following the opening of a Summer term is the end of the refund period.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction or exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

⁵In addition, Mountainlair Fee \$.75 per term and Student Union Building Fee \$1.00 per term for full-time students.

Laboratory Fees and Deposits

Breakage Deposit	10.00	10.00
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Special Fees

Registration Fee (per semester)	50.00*	50.00*
Registration Fee (per semester hour)	4.00**	4.00**
Late Registration Fee	2.00	2.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

Laboratory fee for University students not regularly enrolled in the School of Medicine: for one laboratory course, \$5.00, and for more than one laboratory course, \$10.00.

Microscopes may be rented from the Book Store at a cost of \$20.00 per semester.

*New registration fee, imposed by law, effective June, 1959.

**New registration fee (for part-time students), imposed by law, effective June, 1959.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year. The grade-point average for the third year must be at least 1.5 per registration hour.

Before being accepted in the fourth year clinical phase of medical technology, an approved transcript evaluation from the Registry of Medical Technologists of the American Society of Clinical Pathologists, Muncie, Indiana, must be on file in the office of the Assistant Registrar, Medical Center.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During the first year of enrollment in the School of Medicine students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Semester</i>	<i>Hr.</i>	<i>Second Semester</i>	<i>Hr.</i>
Comparative Anatomy 231	5	Parasitology 255	4
Pathology 150	3	Microbiology 223	5
Biochemistry 139	4	Biochemistry 239	4
Physiology 141	4	Pathology 151	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygienic Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.

101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.
102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiograph machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

III. General University Information

ADMISSION REQUIREMENTS

Candidates for admission to the University must be at least sixteen years of age. They may be admitted either by examination or on the basis of official transcripts of record. Transcripts of secondary school record must be sent by the principal directly to the Registrar of the University immediately after the student's graduation;¹ transcripts of college or university record must be sent by the registrar of the other institution directly to the Registrar of the University immediately after the student has completed his work in that institution. Transcripts should be received by the Registrar of the University at least three weeks prior to the beginning of the term or semester in which the applicant is interested. The transcripts received in support of applications for admission become the property of the University and are permanently filed in the office of the Registrar.

Applicants for admission who do not have transcripts showing graduation from accredited secondary schools on file in the office of the Registrar of the University or who do not have official transcripts from colleges or universities previously attended on file in the office of the Registrar of the University, may, at the discretion of the Committee on Admissions, be permitted to register provisionally. If satisfactory transcripts cannot be obtained, the registration will be cancelled and the fees paid by the applicant will be returned, in accordance with the University refund schedule. A provisional registration will not be continued for a period longer than one week.

Conditional Admission. Students must make up all deficiencies before they can be classified as sophomores.

SPECIAL STUDENTS

Mature students, offering at least nine units of the requirements for admission, including two units of English, may, upon written application to the Committee on Admissions, be permitted to register as special students. Special students must make up all deficiencies before they can be classified as sophomores.

ENTRANCE UNITS

A unit in any subject represents the amount of work that may be done in a standard high school year of thirty-six weeks, with five recitation periods per week, of no less than forty minutes each. In courses where laboratory work is required, from two to three periods of laboratory work are considered the equivalent of one period of recitation according to the amount of outside preparation required in connection with such work.

For admission to West Virginia University the student must have graduated from high school and present 15 units of high school work acceptable to the University.

A. The following groups are required:

1. Four units of English.²
2. Three units in a second subject.
3. Two units in each of two other subjects.
4. One unit of plane geometry is required of premedical, pre dental, and premedical technology students and of students who intend to select chemistry, geology, mathematics, or physics as their major subject.

Either the three-unit subject or one of the two-unit subjects must include one unit of algebra.

B. Work in the following subjects not to exceed the number of units placed after each subject will be accepted.

¹In accrediting West Virginia secondary schools the University follows the classification made by the State Department of Education.

²A student may enter the University with 3 units of English and satisfy admission requirements by making a satisfactory grade on the English Placement Test, or by successfully completing English 0, English Composition, or English 1, Composition and Rhetoric.

<i>Subject</i>	<i>Units</i>	<i>Subject</i>	<i>Units</i>
English ²	4	Science ⁵	
Journalism	1	Biology ⁶	1
Speech	1	Botany ⁶	1
Foreign languages ³		Chemistry	1
French	3	General Science	1
German	3	Geology	1
Greek	3	Physical Geography	1
Italian	3	Physics	1
Latin	4	Physiology	1/2
Spanish	3	Zoology ⁶	1
Education	2	Commercial geography	1/2
Mathematics		Commercial law	1/2
General	1	Vocational subjects (not to	
Algebra	2	exceed 5 units)	
Plane geometry	1	Agriculture	4
Solid geometry	1/2	Home Economics	3
Trigonometry	1/2	Industrial training	3
History and Social Science ⁴		Bookkeeping, or bookkeeping	
History	3	and commercial arithmetic	2
Social Science	3	Commercial arithmetic (alone) ..	1/2
Drawing		Shorthand	2
Free-hand drawing	1	Typing	1
Mechanical drawing	1	Aeronautics	1
Music	2	Art	1
Physical education	1	Hygiene	1

CREDIT ACCEPTED FROM A JUNIOR COLLEGE

The maximum credit accepted from a junior college accredited by the North Central Association of Colleges and Secondary Schools or other regional accrediting association will not exceed seventy-two (72) semester hours, and credit will be allowed for lower division courses only. No credit will be allowed for courses completed in a junior college subsequent to attainment of junior or higher rank by the student at the University.

ADVANCED STANDING EXAMINATION

Application for advanced standing on work of college grade for which college credit cannot be established on the basis of official transcript of record should be made to the Registrar of the University not later than two weeks after the applicant's matriculation. Upon payment of the proper fee the Registrar will issue an examination permit. After examination, the department will report to the Registrar the University course, if any, for which the applicant is entitled to credit.

REGISTRATION

Persons who are not registered as students in the University or who are not members of its administrative or teaching staffs shall not be admitted to regular attendance in University classes.

All students are expected to register on the days set apart for registration at the beginning of each semester or term of the University. All freshmen are required to take intelligence, placement, medical, and physical tests.

Immediately after completion of their registration, all students are expected to pay their fees at the Office of the Comptroller, Medical Center, or at the Comptrollers' desk in the Field House, depending on the place of registration.

²See Footnote 2, page 24.

³One unit of Latin will be accepted. No less than 2 units of either French, German, Greek, Italian, or Spanish will be accepted unless sufficient additional work in that language is taken in college to complete a minimum of 2 units.

⁴A group of 3 units may be formed combining 2 units of history with 1 unit of social science or 2 units of social science with 1 unit of history.

⁵A group of 2 or 3 units in science may be made by combining one unit each of any 2 or 3 of the following: biology, botany, chemistry, geology, physics, and zoology.

⁶If a student presents one unit of biology for admission, he may have credit for no more than 1/2 unit in either botany or zoology.

WITHDRAWAL FROM THE UNIVERSITY

A student who desires to withdraw from the University must obtain a withdrawal card from the office of the Registrar. Withdrawal procedure will be explained to him when he obtains the card.

Students who withdraw from the University without permission will receive at the end of the semester or term a grade of "F" (failure) in each of the subjects for which they are registered and will be indefinitely suspended from the University.

Students who desire to drop part of their work may withdraw from classes in which they are enrolled with a grade of "W" at any time prior to the end of the second week following the date set for midsemester reports. The withdrawal permit must be approved by the adviser and filed with the Registrar. If such withdrawal reduces the student's hours below the required minimum, the permit must be approved by the Scholarship Committee. Withdrawals after the above date will be permitted only in exceptional cases and must be approved by the Scholarship committee of the college in which the student is registered.

CAMPUS PARKING REGULATIONS

Students are required to observe all rules and regulations of the University with respect to the parking of motor vehicles on the campus.

ENGLISH PROFICIENCY EXAMINATION

Each undergraduate who begins college work after June 1, 1952, must pass a proficiency examination in English after the beginning of his junior year in order to qualify for graduation. He shall take the examination during the first semester of his junior year, and if not declared proficient, shall repeat the examination as many times as necessary. The examination shall be administered by the English Proficiency Board.

STANDARDS OF SCHOLARSHIP

GRADING SYSTEM

- A—excellent (given only to those students of superior ability and attainment)
- B—good (given to those students who are well above average, but not in the highest group)
- C—fair (average students)
- D—poor but passing
- I—incomplete
- F—failure
- W—all withdrawals prior to the end of the second week following the date set for mid-semester reports
- WP—withdrew passing subsequent to the end of the second week following the date set for mid-semester reports
- WF—withdrew failing subsequent to the end of the second week following the date set for mid-semester reports
- X—auditor, no grade and no credit

Average grades are computed upon all courses for which the student has registered, except for courses with grades of "W" and "WP." The grade-point values per semester hour are: "A"—4, "B"—3, "C"—2, "D"—1, "I," "F," "WF"—0. When the grade of "I" becomes converted into a grade carrying credit the average is calculated on the basis of the new grade.

Average grades for students applying for admission to the School of Medicine are completed as above, both for credits earned at West Virginia University and at other institutions. When grades from other institutions are expressed in a system different from the one used at West Virginia University, the values are adjusted to give an equivalent measure of excellence.

THE UNIVERSITY HEALTH SERVICE

The University Health Service, organized as a division in the School of Medicine, provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which

provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University Pharmacy. All students receive a complete physical examination, including blood tests, urinalysis, and X-ray, during their first semester in the University. In addition, the Health Service provides special examinations to students, to University food handlers, and to others, as may be required for University purposes. The University Pharmacy, operated by the School of Pharmacy, supplies prescribed medication at nominal charges.

The staff of the Health Service includes three full time and five part time physicians, a consulting radiologist, six nurses, and two laboratory technicians. The Departments of Pathology and Microbiology cooperate in various diagnostic laboratory procedures.

The Health Services occupies a well-designed University Health Center constructed in 1941. The three-story building, centrally located on the campus and fronting on College Avenue adjacent to Reynolds Hall, is a T-shaped structure of brick and concrete.

On the first floor are the receiving room, office of the secretary, offices for physicians, a room for minor surgery, and a treatment room. One room on this floor is assigned to the University Pharmacy. On the second floor are additional offices for physicians as well as the diagnostic laboratory equipped for serological, chemical, bacteriological, and hematological examinations. The X-ray unit, equipped for fluoroscopy and radiography, and with a photo-roentgen unit, is located in rooms of modern design adjacent to the laboratory and conveniently accessible to patients.

The third floor of the Health Center is equipped with about 20 beds and operates as an infirmary for students requiring bed care for acute illness. The patients are under the care of University physicians and a registered nurse is in attendance at all times.

MEDICAL STUDENTS 1958-1959

FIRST YEAR STUDENTS (ENTERED SEPTEMBER 1958)

Angelos, Louis Ernest (A.B., West Virginia University, 1955)	Weirton
Arnold, Richard Byron	Huntington
Ashworth, Halbert Eugene (A.B., Duke University, 1956)	Charleston
Barile, John Lee (A.B., West Virginia University, 1958)	Clarksburg
Bowman, Robert Lee (B.S., Marshall College, 1957)	Fairmont
Bromley, Norman Paul (A.B., Marshall College, 1958)	Huntington
Calhoun, Joseph Harlan (A.B., West Virginia University, 1958)	Moorefield
Cooley, Frederick Morton	Nitro
Cutlip, Basil Duncan, Jr. (A.B., West Virginia University, 1958)	Webster Springs
Dickenson, Donald Cobb (A.B., West Virginia University, 1958)	Princeton
Fuscaldo, John Thomas (A.B., West Virginia University, 1958)	Fairmont
Gaziano, Dominic (A.B., West Virginia University, 1958)	Pemberton
Goad, Francis Arthur (A.B., West Virginia University, 1958)	Clendenin
Griffith, Jesse Samuel	Charleston
Gross, Stanley Burton (A.B., M.S., West Virginia University, 1954, 1957)	Morgantown
Harris, William Kiley (A.B., West Virginia University, 1958)	Morgantown
Hemmings, Ira Lawrence, Jr.	Charleston
Hogshead, Ida May (B.S., M.S., West Virginia University, 1948, 1949)	Montgomery
Jordan, Jon Lyle (A.B., West Virginia University, 1958)	Oak Hill
Jordan, William Gregor (B.S., Alderson-Broadbudd College, 1957)	Oak Hill
Karickhoff, Alfred Norman (A.B., West Virginia University, 1958)	Belington
Kern, Marguerite Ann	Welch
Ladwig, Charles Lloyd, Jr. (A.B., West Virginia University, 1958)	Lost Creek
Lewis, Charles William (B.S., Marshall College, 1958)	Huntington
Melott, Robert Nelson	Newell
Miller, John Mark (A.B., Bridgewater College, 1958)	Burlington
Mosrie, Azett Jimmie (A.B., Duke University, 1958)	Princeton
Moss, Hubert Vencill	Weirton
Nassif, Thomas John (A.B., West Virginia University, 1958)	Rowlesburg
Neale, Spottswood Pryor (B.S., Davidson College, 1958)	Princeton
*Nelson, George Humphrey (A.B., College of Charleston, 1951; M.S., Ph.D., Medical College of South Carolina, 1953, 1955)	Morgantown
Rashid, Richard	Charleston
Ruggiero, Joseph (B.S., Fairmont State College, 1958)	Fairmont
Schmid, William Henry (A.B., West Virginia University, 1958)	Benwood
Schmidt, James Lee (A.B., West Virginia University, 1958)	Morgantown
Shaffer, Kenneta Jean	Morgantown
Steele, James Lebrecht (A.B., West Virginia University, 1957)	Bartley
Stephens, Pete Louis	Weirton
Watkins, David Ashby (A.B., West Virginia University, 1958)	Buckhannon
Watring, Watson Glenn (B.S., Washington and Lee University, 1958)	Beverly
Zakaib, Edward Albert	Charleston

SECOND YEAR STUDENTS

Brooks, Marion Howard (A.B., West Virginia University, 1958)	Glen Rogers
Curry, William Lake (A.B., West Virginia University, 1957)	Barboursville
Dawson, Robert Lloyd (B.S., Marshall College, 1957)	Huntington
Dawson, Wallace Lantz (A.B., West Virginia University, 1957)	Kingwood
Dawson, William Sidney, Jr. (A.B., Berea College, 1954)	Logan
Fidler, Robert Young (A.B., West Virginia University, 1957)	Belle
Germont, Patricia Ann (B.S., Bethany College, 1951)	Wellsburg
Glover, Douglas Dennis (B.S. Pharm., West Virginia University, 1951)	Rowlesburg
Groves, Louis William, Jr. (A.B., West Virginia University, 1958)	Meadow Bridge
Heagarty, Margaret Caroline (B.A., Seton Hall College, 1957)	Beckley
Hicks, Donald Lee (A.B., Columbia University, 1957)	Beckley
Janicki, Thomas Joseph (B.S., Fairmont State College, 1957)	Barrackville
Johnson, William Waldo (B.S., Morris Harvey College, 1954)	Charleston

*Special Student.

Kostello, Robert Theodore (B.S., West Virginia University, 1957) Benwood
 Maiolo, Joseph Anthony (A.B., West Virginia University, 1957) Morgantown
 Maxey, Stephen Stone (A.B., West Virginia University, 1957) Montcoal
 Mazzocco, Victor Eugene (A.B., West Virginia University, 1950) Morgantown
 Meador, James Carr, Jr. (B.A., Duke University, 1957) Charleston
 Miller, James Barry (A.B., West Virginia University, 1957) Morgantown
 Pasquale, Samuel Anthony (A.B., West Virginia University, 1957) Williamson
 Poole, Thomas Robert (B.S., Marshall College, 1953; M.S., West Virginia
 University, 1957) Glasgow
 Power, Curtis Garland, Jr. (A.B., West Virginia University, 1957) Martinsburg
 Reed, Joseph Blount (A.B., West Virginia University, 1957) Burlington
 Repaire, John Richard (A.B., West Virginia University, 1958) Montgomery
 Snyder, James Leigh (A.B., West Virginia University, 1958) Crumpler
 Spiggle, Wayne Campbell (A.B., Berea College, 1956) Davis
 Sponaugle, Harlan Dale (A.B., West Virginia University, 1958) Franklin
 Tolley, Gary Maurice (B.S., Marshall College, 1957) Huntington
 Van Gilder, John Corley (A.B., West Virginia University, 1957) Sutton
 Wanger, William Halvard (B.S., Muskingum College, 1957) Shepherdstown
 White, David Lee (A.B., West Virginia University, 1957) Morgantown
 Wotring, James William, Jr. (A.B., West Virginia University, 1957) Kingwood
 Yurko, Anthony Andrew (B.S., William and Mary College, 1957) Weirton

STUDENTS IN MEDICAL TECHNOLOGY

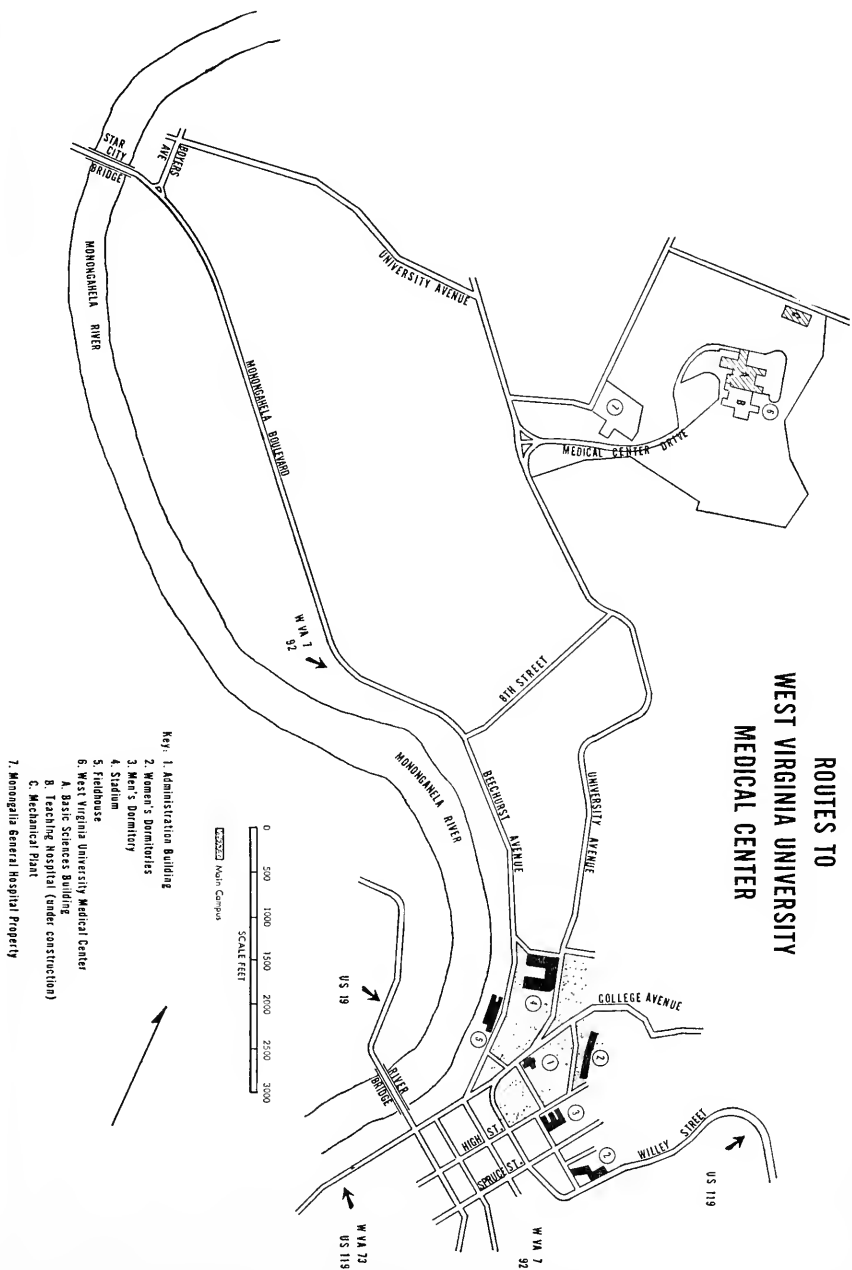
JUNIOR YEAR

Barr, Jean Lynn	Keyser
Clise, Ruth	Enterprise
Courtney, Virginia	Waynesboro, Virginia
Graham, Nancy	Clarksburg
Orndorff, Robert	Charles Town
Peters, Janet	Wheeling
Roth, Jeanne	Wheeling
San Julian, Judith	Clarksburg
Spiker, James	Inwood
Tiano, Jacqueline	Clarksburg
Winger, Anne	Shinnston

SENIOR YEAR

Dill, Joan	Wheeling
Lawson, Anne	Grafton
Niehaus, Carole	Wheeling
Rhodes, Susan	Morgantown
Wallace, Mary Farr	West Union

ROUTES TO WEST VIRGINIA UNIVERSITY MEDICAL CENTER



SCHEDULE OF COURSES FOR 1959-60

Course	Hr. Per Week			Hr. Per Semester			Semester Credit Hours
	Lect.	Lab.	Total	Lect.	Lab.	Total	
First Year—First Semester							
Gross Anatomy 201	2	7	9	32	112	144	6
Microscopic Anatomy 205	3	9	12	48	144	192	6
Medical Biochemistry 231	4	8	12	64	128	192	7
Correlation Clinic 277	1	0	1	16	0	16	1
First Year—Second Semester							
Gross Anatomy 202	3	10	13	48	160	208	6
Neuroanatomy 203	2	4	6	32	64	96	4
Physiology 241	7	8	15	112	128	240	9
Correlation Clinic 278	1	0	1	16	0	16	1
Second Year—First Semester							
Medical Microbiology 221	3	9	12	48	144	192	6
General and Tumor Pathology 251	4	10	14	64	160	224	6
Physical Diagnosis 291	2	0	2	32	0	32	2
Introductory Medicine 293	1	1	2	16	16	32	1
History of Medicine 275	1	0	1	16	0	16	1
Principles of Surgery 281	2	0	2	32	0	32	1
Second Year—Second Semester							
Public Hygiene 222	2	0	2	32	0	32	2
Special Pathology 252	1	2	3	16	32	48	2
Clinical Pathology 254	2	6	8	32	96	128	3
Medical Pharmacology 262	5	6	11	80	96	176	6
Physical Diagnosis 292	0	2	2	0	32	32	1
Introductory Medicine 294	1	1	2	16	16	32	1
Principles of Surgery and Surgical Anatomy 282	0	2	2	0	32	32	2
Introduction to Obstetrics 296	2	0	2	32	0	32	2
Parasitology 218	1	2	3	16	32	48	2

DAY AND HOUR SCHEDULE

FIRST YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Biochemistry					Micro-Anatomy				
T	Gross Anatomy					Micro-Anatomy				
W	Biochemistry					Gross Anatomy	Corr. Clinic			
Th	Gross Anatomy					Micro-Anatomy				
F	Biochemistry					Micro-Anatomy				

FIRST YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Physiol.	Gross Anatomy				Physiology				
T	Physiology					Gross Anatomy				
W	Physiol.	Gross Anatomy								
Th	Physiol.	Neuroanatomy				Gross Anatomy				
F	Physiol.	Neuroanatomy				Physiology			Corr. Clinic	

SECOND YEAR—FIRST SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Medicine Clinic		Physical Diagnosis	Surgery		Pathology				
T	Microbiology					Pathology				
W		History of Medicine	Physical Diagnosis	Surgery						
Th	Microbiology					Pathology				
F	Microbiology					Pathology				

SECOND YEAR—SECOND SEMESTER

	8	9	10	11	12	1	2	3	4	5
M	Surgery & Surg. Anatomy		Obstetrics	Pharmacology		Clinical Pathology				
T	Pharmacology					Clinical Pathology				
W	Public Hygiene		Medicine	Pharmacology						
Th	Medicine	Special Pathology				Parasitology				
F	Physical Diagnosis		Obstetrics	Pharmacology		Pharmacology				





WEST VIRGINIA UNIVERSITY

The School of

MEDICINE

and Curriculum in

MEDICAL TECHNOLOGY

Announcements 1960 - 61

WEST VIRGINIA UNIVERSITY BULLETIN



YEAR 1960

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12	3	4	5	6	7	8	9
10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19	10	11	12	13	14	15	16
17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26	17	18	19	20	21	22	23
24	25	26	27	28	29	30	28	29						27	28	29	30	31			24	25	26	27	28	29	30
31																											
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7							1 2	3	4	5	6	7	8	9	7	8	9	10	11	12	13
8	9	10	11	12	13	14	5	6	7	8	9	10	11	10	11	12	13	14	15	16	14	15	16	17	18	19	20
15	16	17	18	19	20	21	12	13	14	15	16	17	18	17	18	19	20	21	22	23	21	22	23	24	25	26	27
22	23	24	25	26	27	28	19	20	21	22	23	24	25	24	25	26	27	28	29	30	28	29	30	31			
29	30	31					26	27	28	29	30			31													
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12	4	5	6	7	8	9	10
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19	11	12	13	14	15	16	17
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26	18	19	20	21	22	23	24
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30				25	26	27	28	29	30	31
							30	31																			

YEAR 1961

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7					1	2	3	4					1	2	3	4					1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28					26	27	28	29	30	31		23	24	25	26	27	28	29
																					30						
MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3							1						1	2
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
28	29	30	31				25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30	31		
														30	31												
SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1 2										1	2	3	4							1	2
3	4	5	6	7	8	9	1	2	3	4	5	6	7	5	6	7	8	9	10	11	3	4	5	6	7	8	9
10	11	12	13	14	15	16	8	9	10	11	12	13	14	12	13	14	15	16	17	18	10	11	12	13	14	15	16
17	18	19	20	21	22	23	15	16	17	18	19	20	21	19	20	21	22	23	24	25	17	18	19	20	21	22	23
24	25	26	27	28	29	30	22	23	24	25	26	27	28	26	27	28	29	30			24	25	26	27	28	29	30
							29	30	31												31						

ON THE COVER: The West Virginia University Medical Center. The completion of the Teaching Hospital in 1960 enables West Virginia University to offer a complete program of medical education.

UNIVERSITY CALENDAR

1960

May 28, Saturday	Alumni Day
May 29, Sunday	Baccalaureate Exercises
May 30, Monday	Commencement
June 6, Monday	Registration for First Term, Summer Session
June 7, Tuesday	First Classes, First Term, Summer Session*
July 4, Monday	Independence Day, a holiday
July 15, Friday	Close of First Term, Summer Session
July 18, Monday	Registration for Second Term, Summer Session
July 19, Tuesday	First Classes, Second Term, Summer Session
August 26, Friday	Close of Second Term, Summer Session
September 12, Monday, to September 18, Sunday, inclusive	Freshman Week Program
September 16, Friday, and September 17, Saturday	General Registration, First Semester
September 19, Monday	First Classes, First Semester
October 11, Tuesday	Meeting of University Senate
October 13, Thursday	English Proficiency Examination
November 7, Monday	Mid-Semester Reports Due
November 23, Wednesday, to November 27, Sunday, inclusive	Thanksgiving Recess
December 17, Saturday, 12:00 noon, to Tuesday, January 3, inclusive	Christmas Recess

1961

January 21, Saturday	Last Classes, First Semester
January 23, Monday, to January 28, Saturday	Final Examinations for First Semester
February 3, Friday, and February 4, Saturday	General Registration for Second Semester
February 6, Monday	First Classes, Second Semester
February 7, Tuesday	West Virginia University Day
February 14, Tuesday	Meeting of University Senate
February 23, Thursday	English Proficiency Examination
March 27, Monday	Mid-Semester Reports Due
March 30, Thursday, to April 5, Wednesday, inclusive	Easter Recess
May 9, Tuesday	Meeting of University Senate
May 26, Friday	Last Classes, Second Semester
May 27, Saturday, to June 3, Saturday	Final Examinations for Second Semester
May 30, Tuesday	Memorial Day, a holiday
June 3, Saturday	Alumni Day
June 4, Sunday	Baccalaureate Exercises
June 5, Monday	Commencement

*Classes will be held on Saturday, July 9.

NOTE: Clinical courses offered during the third and fourth years of enrollment in the School of Medicine may deviate to varying degrees from the published Calendar.

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West Virginia University

ESTABLISHED FEBRUARY 7, 1867

MORGANTOWN

The Board of Governors

	TERM EXPIRES
THOMAS L. HARRIS, <i>President</i> , Parkersburg	1960
K. DOUGLAS BOWERS, <i>Vice-President</i> , Beckley	1962
JAMES H. SWADLEY, JR., <i>Secretary</i> , Keyser	1967
A. C. SPIER, <i>Wheeling</i>	1961
FRANK J. ZSOLDOS, <i>Pineville</i>	1963
WILLIAM G. THOMPSON, <i>Montgomery</i>	1961
RAYMOND E. SALVATI, <i>Huntington</i>	1965
FORREST H. KIRKPATRICK, <i>Wheeling</i>	1966
OKEY B. GLENN, <i>Williamson</i>	1968
ELVIS JACOB SEAH, JR., <i>Chief Executive Officer</i> , Morgantown	

The Board of Governors has charge of the educational, administrative, financial and business affairs of the University and Potomac State College of West Virginia University.

West Virginia University Bulletin
Series 60, No. 11-4, May, 1960

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in Morgantown, W. Va., under the Act of August 24, 1912.
Issued Monthly

The School of Medicine

THE ADMINISTRATIVE OFFICERS

- ELVIS JACOB STAIR, JR., A.B., B.A. IN JURISPRUDENCE, M.A. (OXON.), B.C.L., LL.D.,
President of the University
KENNETH EARL PENROD, B.S., PH.D., *Vice-president, Medical Center, and Professor of Physiology*
EDWARD J. VAN LIERE, B.A., M.S., M.D., PH.D., LITT.D., *Dean and Professor of Physiology*
BETTY BOYD, A.B., *Dean of Women*
JOSEPH CLAY GLUCK, B.A., B.D., *Director of Student Affairs*
LOUISE KEENER, B.A., *Comptroller and Director of Business Affairs*
J. EVERETT LONG, M.A., *Registrar of the University and Chairman of the Committee on Admissions*
ROBERT FERGUSON MUNN, M.A., *Director of the University Libraries*
HOWARD OLIVER CROASMIN, B.S., *Financial Secretary, Medical Center*
ALDERSON FRANCIS FRY, A.B., B.L.S., A.M., *Medical Center Librarian*
LYLE E. HEROD, A.B., M.S., *Assistant Registrar, Medical Center*

THE FACULTY

EMERITI

- SIMON B. CHANDLER, *Professor Emeritus of Gross Anatomy and Neuroanatomy*
GIDEON STANTHOPE DODDS, *Professor Emeritus of Histology and Embryology*
ROBB SPAULDING SPRAY, *Professor Emeritus of Bacteriology and Public Hygiene*

PROFESSORS

- HAROLD I. AMORY, *Professor and Chairman of Radiology*
A.B., Randolph-Macon College, 1927; M.D., Medical College of Virginia, 1931.
EDMUND B. FLINK, *Professor and Chairman of Medicine*
M.B., M.D., PH.D., University of Minnesota, 1937, 1938, 1945.
NICHOLAS W. FUGO, *Professor and Chairman of Obstetrics and Gynecology*
A.B., Syracuse University, 1935; M.S., PH.D., State University of Iowa, 1937, 1940;
M.D., University of Chicago, 1950.
MILFORD LEROY HOBBS, *Professor and Chairman of Pathology*
M.D., Washington University, 1931.
ROBERT JOSEPH JOHNSON, *Professor and Chairman of Gross and Neurological Anatomy*
M.D., University of Iowa, 1943.
RICHARD E. JONES, *Professor of Anesthesiology*
M.D., Ohio State University, 1950.
REGINALD FREDERICK KRAUSE, *Professor and Chairman of Biochemistry*
A.B., M.S., West Virginia University, 1937, 1939; PH.D., University of Rochester, 1942; M.D., University of Vermont, 1951.
WILLIAM GENE KLINGBERG, *Professor and Chairman of Pediatrics*
A.B., Wichita University, 1938; M.D., Washington University, 1943.
DAVID WILMARTH NORTHUP, *Professor and Chairman of Physiology*
A.B., Reed College, 1930; A.M., University of Oregon, 1932; PH.D., University of Illinois, 1935.
KENNETH EARL PENROD, *Professor of Physiology and Vice-President, Medical Center*
B.S., Miami University (Ohio), 1938; PH.D., Iowa State College, 1942.
JOHN MADISON SLACK, *Professor and Chairman of Microbiology and Public Hygiene*
A.B., M.S., PH.D., University of Minnesota, 1936, 1937, 1940.
JOHN CLIFFORD STICKNEY, *Professor of Physiology*
B.S., Wheaton College, 1933; M.S., University of Washington, 1936; PH.D., University of Minnesota, 1940.
EDWARD JERALD VAN LIERE, *Professor of Physiology and Dean*
B.A., M.S., University of Wisconsin, 1915, 1916; M.D., Harvard University, 1920;
PH.D., University of Chicago, 1927; LITT.D., Medical College of Virginia, 1948.
DANIEL THOMAS WATTS, *Professor and Chairman of Pharmacology*
A.B., Elon College, 1937; PH.D., Duke University, 1942.

- THOMAS WALLEY WILLIAMS, *Professor and Chairman of Microanatomy and Organology*
B.S., M.S., Ph.D., University of Pittsburgh, 1931, 1937, 1939.
BERNARD ZIMMERMAN, *Professor and Chairman of Surgery*
M.D., Harvard University, 1945; Ph.D., University of Minnesota, 1953.

CLINICAL PROFESSORS

- JUSTUS C. PICKETT, *Clinical Professor of Surgery*
M.D., Western Reserve University, 1928.
CECIL B. PRIDE, *Clinical Professor of Surgery*
A.B., Ohio Wesleyan University, 1916; B.S., West Virginia University, 1921; M.D., Western Reserve University, 1923.

ASSOCIATE PROFESSORS

- CHARLES CHESTER BOYER, *Associate Professor of Gross and Neurological Anatomy*
B.S., St. Bonaventure, 1938; M.A., Ph.D., Duke University, 1940, 1948.
WILLIAM KNOX HARRELL, *Associate Professor of Microbiology*
B.S., University of Arkansas, 1917; M.S., University of Oklahoma, 1949; Ph.D., University of Michigan, 1951.
GORDON C. HILTS, *Associate Professor of Gross and Neurological Anatomy*
B.S., Washington Missionary College, 1917; M.S., Ph.D., University of Maryland, 1949, 1953.
A. CURTIS HIGGINBOTHAM, *Associate Professor of Microscopic Anatomy and Organology*
B.S., Ph.D., Northwestern University, 1935, 1939.
ALEXANDER D. KENNY, *Associate Professor of Pharmacology*
B.S., London University, 1945; M.S., Ph.D., Institutum Divi Thomae, 1949, 1950.
JOHN JOSEPH LAWLESS, *Associate Professor of Medicine and Director of University Health Service*
B.S., M.A., Ph.D., University of Minnesota, 1930, 1931; M.D., Rush Medical College, 1939.
FREDERICK JACKSON LOISPEICH, *Associate Professor of Biochemistry*
B.S., M.S., West Virginia University, 1948, 1952; Ph.D., Purdue University, 1955.
D. FRANKLIN MILANI, *Associate Professor of Surgery*
A.B., B.S., West Virginia University, 1942, 1943; M.D., University of Pennsylvania, 1944.
RANDALL WILLIAM REYER, *Associate Professor of Microscopic Anatomy and Organology*
A.B., M.A., Cornell University, 1939, 1942; Ph.D., Yale University, 1947.
LEROY HALLOWELL SANE, *Associate Professor of Pharmacology*
B.S., Shippensburg (Pa.) State Teachers College, 1938; A.M., Ph.D., University of Pennsylvania, 1940, 1951.
DAMON C. SHELFON, *Associate Professor of Biochemistry*
B.S., M.S., Ph.D., Purdue University, 1947, 1949, 1950.
CLARK KENDALL SLEUTH, *Associate Professor of Medicine and Assistant to the Dean*
A.B., B.S., West Virginia University, 1933, 1935; M.D., University of Chicago, 1938.
HERBERT E. WARREN, *Associate Professor of Surgery*
B.S., Washington and Jefferson College, 1942; M.D., University of Chicago, 1946; Ph.D., University of Minnesota, 1960.

CLINICAL ASSOCIATE PROFESSORS

- WILLIAM AUGUST EHRCOTT, *Clinical Associate Professor of Pathology*
B.S., Lebanon Valley College, 1933; M.D., Jefferson Medical College, 1942.
WILLIAM H. GERWIG, JR., *Clinical Associate Professor of Surgery*
A.B., West Virginia University, 1932; M.D., University of Maryland, 1935.

ASSISTANT PROFESSORS

- WILLIAM JAMES CANADY, *Assistant Professor of Biochemistry*
B.S., Fordham University, 1946; M.S., Ph.D., George Washington University, 1950, 1955.
JAMES E. DYSON, JR., *Assistant Professor of Microbiology*
B.S., Drake University, 1947; M.S., State University of Iowa, 1950; Ph.D., University of Michigan, 1954.
WILLIAM W. FLEMING, *Assistant Professor of Pharmacology*
A.B., Harvard University, 1954; M.A., Ph.D., Princeton University, 1956, 1957.

- EDWIN CHARLES GANGLOFF, *Assistant Professor of Biochemistry*
B.S., M.S., Ohio State University, 1945, 1947; Ph.D., Wayne University, 1955.
- JOHN EDGAR HALL, *Assistant Professor of Microbiology*
B.S., M.S., University of New Hampshire, 1951, 1953; Ph.D., Purdue University, 1958.
- JOHN BARKER HARLEY, *Assistant Professor of Medicine*
B.S., Dickinson College, 1943; M.D., University of Maryland, 1946.
- HUGH ALEXANDER LINDSAY, *Assistant Professor of Physiology*
B.S., M.Sc., University of Western Ontario, 1949; Ph.D., University of Toronto, 1955.
- BETHOLINE FRANCES LOVE, *Assistant Professor of Pathology*
B.S., Western Reserve University, 1946; M.S., University of Oklahoma, 1950.
- CARMINE CHARLES MASCOLI, *Assistant Professor of Microbiology*
B.S., Holy Cross College, 1949; M.S., University of Connecticut, 1953; Ph.D., Ohio State University, 1956.
- EDWARD GEORGE STUART, *Assistant Professor of Pathology*
B.S., West Chester State College, 1948; Ph.D., University of Pennsylvania, 1952; M.D., Duke University, 1955.

CLINICAL ASSISTANT PROFESSORS

- EDGAR FRANK HEISKELL, JR., *Clinical Assistant Professor of Surgery*
A.B., B.S., West Virginia University, 1938, 1940; M.D., Northwestern University, 1943.
- GEORGE RALPH MAXWELL, *Clinical Assistant Professor of Medicine*
B.S., West Virginia University, 1921; M.D., University of Cincinnati, 1923.
- MAYNARD PRIDI, *Clinical Assistant Professor of Surgery*
A.B., Marietta College, 1935; M.D., Western Reserve University, 1939.
- ARCHIE LEMUEL STARKEY, *Clinical Assistant Professor of Medicine, and Superintendent of Hopemont Sanitarium*
B.S., West Virginia University, 1925; M.D., University of Arkansas, 1937.
- FREDERICK RENDFELL WHITLESEY, *Clinical Assistant Professor of Medicine*
A.B., Wooster College, 1921; M.D., Western Reserve University, 1925.

INSTRUCTORS

- WILLIAM E. ANDERSON, *Instructor in Medicine*
A.B., Gustavus Adolphus College; M.D., University of Minnesota.
- THOMAS ROBERT ARGIRO, *Instructor in Pathology*
B.S., West Virginia University, 1952; M.D., Medical College of Virginia, 1951.
- WILBERT E. GLADFELTER, *Instructor in Physiology*
A.B., Gettysburg College, 1952; Ph.D., University of Pennsylvania, 1960.
- WILLIAM RUSSELL GOODGE, *Instructor in Gross and Neurological Anatomy*
B.S., Ph.D., University of Washington, 1949, 1957; M.A., University of Michigan, 1950.
- LOIS JOANNE KINLEY, *Instructor in Biochemistry*
B.S., M.S., West Virginia University, 1955, 1959.
- WALTER H. MORAN, *Instructor in Surgery*
A.B., B.S., University of North Dakota, 1952, 1953; M.D., Harvard University, 1955.
- ROBERT LEO ROBINSON, *Instructor in Pharmacology*
A.B., M.A., Ph.D., University of Kansas, 1951, 1954, 1958.

CLINICAL INSTRUCTORS

- CARL H. CATHIE, JR., *Clinical Instructor in Surgery*
A.B., B.S., West Virginia University, 1948, 1950; M.D., Harvard University, 1952.
- CARE EDWARD JOHNSON, *Clinical Instructor in Medicine*
A.B., B.S., West Virginia University, 1923, 1925; M.D., Northwestern University, 1928.
- GEORGE H. NELSON, *Clinical Instructor in Biochemistry*
A.B., College of Charleston, S.C., 1951; M.S., Ph.D., Medical College of South Carolina, 1953, 1955.
- ROBERT JULIAN NOTTINGHAM, *Clinical Instructor in Medicine*
B.S., West Virginia University, 1941; M.D., Washington University, 1944.
- HUBERT ADAMS SHAEFFER, *Clinical Instructor in Gross and Neurological Anatomy and Consulting Radiologist, University Health Service*
B.S., West Virginia University, 1927; M.D., Medical College of Virginia, 1929.

CLEMENT ART SMITH, *Clinical Instructor in Gross and Neurological Anatomy*

A.B., Union College, 1934; M.D., Albany College, 1938.

BENJAMIN M. STOUT, *Clinical Instructor in Medicine*

A.B., West Virginia University, 1948; M.D., Jefferson Medical College, 1952.

RESIDENT PHYSICIANS

EMIL L. MANHINI, *Resident in Surgery*

B.S., M.S., West Virginia University, 1951, 1951; M.D., Washington University, 1958.

THOMAS J. TARNAY, *Resident in Surgery*

A.B., Cornell University, 1952; M.D., Columbia University, 1956.

LECTURERS

EDON BRYANT TUCKER, *Lecturer in Pharmacology*

B.S., West Virginia University, 1919; M.D., University of Cincinnati, 1921.

MICHAEL ANTHONY VIGGIANO, *Lecturer in Public Hygiene*

B.S., A.M., West Virginia University, 1932, 1934; M.D., Rush Medical School, 1937;

M.P.H., Johns Hopkins University, 1942.

STANDING COMMITTEES

Admissions and Scholarship

C. K. Sleeth, Chairman

M. L. Hobbs

R. F. Krause

W. K. Harrell

R. J. Johnson

A. C. Higginbotham

Lyle E. Herod

Curriculum:

C. K. Sleeth, Chairman

C. C. Boyer

J. B. Harley

A. D. Kenny

F. J. Lotspeich

Medical Technology

M. L. Hobbs, Chairman

W. A. Ehrigott

E. C. Gangloff

W. K. Harrell

B. F. Love

D. W. Northup

Graduate Education:

L. H. Saxe, Chairman

W. J. Canady

J. M. Slack

D. W. Northup

The School of Medicine

I. Curriculum In Medicine

GENERAL INFORMATION

During the years from 1868 to 1912 the University offered courses in preclinical medical subjects, the scope and designation of the program changing from time to time. In the earlier years a course was scheduled in anatomy, physiology, and hygiene, and in later years the work had grown to include the first two years of a standard medical curriculum. From 1903 to 1911 the University maintained a College of Medicine, giving the M.D. Degree. The first two years were given in Morgantown. Credit for the last two years was accepted from the College of Physicians and Surgeons of Baltimore, to which students transferred at the end of their second year.

Since 1912 the School of Medicine has given only the first two years of the medical curriculum. It is listed as a Recognized School of Basic Medical Sciences by the Council on Medical Education and Hospitals of the American Medical Association. It is also a member of the Association of American Medical Colleges.

The curriculum for the third year will be introduced beginning in the fall of 1960, and the following year the work of the fourth or senior year will be commenced. The first Doctor of Medicine degrees will be granted in the spring of 1962.

BUILDINGS AND EQUIPMENT

The School of Medicine occupies quarters in the newly constructed West Virginia University Medical Center. The Basic Sciences portion of the Center has been in use since the summer of 1957. Construction of the teaching hospital and clinics was completed in January 1960, and occupancy of this portion of the building was completed during the summer of 1960.

BASIC SCIENCES

This portion of the building consists of a central core containing lecture rooms, laboratories, and other teaching facilities, to which are attached five wings. The core, measuring 225 by 225 feet, is five stories high, with the wings extended an additional 100 feet to the north, east, and west.

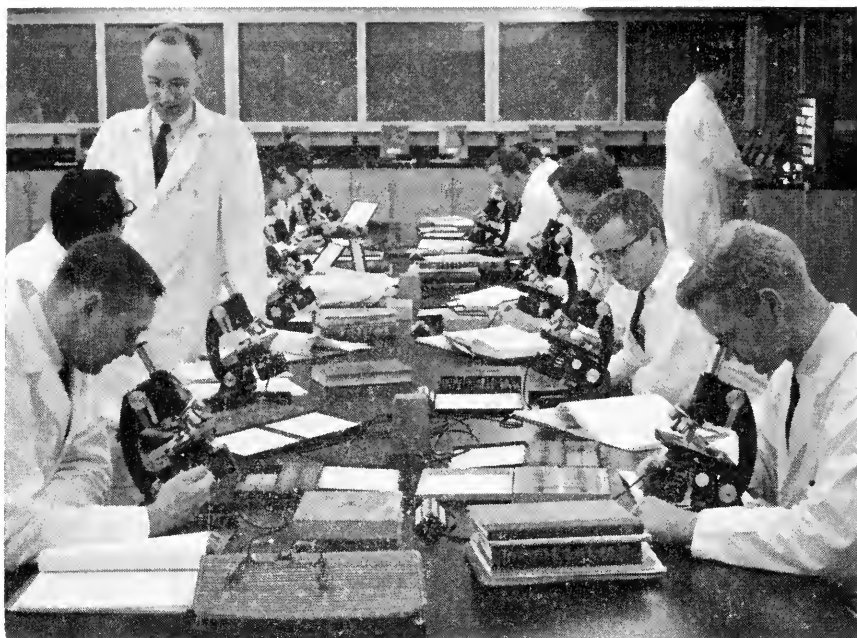
Located on the second, third, and fourth floors of this central area are facilities for teaching anatomy, bacteriology, biochemistry, medicine, pathology, pharmacology, physiology, public health and preventive medicine, and surgery. The School of Dentistry occupies the first floor, while the fifth floor contains mechanical equipment. The wings house the administrative offices, the Medical Library, a 500 seat auditorium and such student facilities as lounge, locker rooms, book store, snack bar, cafeteria and post office. The Schools of Nursing and Pharmacy are housed in one wing.

HOSPITAL AND CLINICS

The 522 bed University Hospital was completed in January of 1960 and has twelve floors. The basement houses central sterile supply, laundry and housekeeping; the ground floor has the cafeteria and kitchen. On the first floor are found the out-patient clinic and the offices of the administrative services. The second floor houses the clinical laboratories, x-ray and psychiatry, the third floor is primarily surgery while on the fourth floor there is obstetrics and pediatrics. The fifth, sixth, seventh and eighth floors are occupied by one-, two-, and four-bed patient rooms and the top two floors contain mechanical equipment.

MEDICAL CENTER LIBRARY

The Library is located on the second floor of the Administrative Wing, with a stack-well extending from the basement up through the center of the Library



STUDENTS during first two years in Medicine receive thorough training in basic sciences of anatomy, microanatomy, biochemistry, microbiology, pathology, and physiology, with introductory courses in medicine, surgery, and obstetrics. Third year is occupied by clinical clerkships in University Hospital.

With 20,000 square feet of floor space, exclusive of stacks, it will seat 300 students, house 160,000 volumes, and provide for all auxiliary services. On hand are 43,000 volumes of which two-thirds are periodicals. In the current periodical room about 900 foreign and domestic periodicals are on display. Fourteen sound-proof rooms give space for small group study. There are also a conference room, history of medicine room, and space for microfilm, photostat, and films.

On hand is all the needed material for basic science courses, with excellent representation in the clinical field, to be expanded as the courses progress. While most of the material is in English, there are outstanding periodicals and books in the major foreign languages. The history collection is being expanded to include good holdings in the secondary material, as well as outstanding original material. This collection is augmented with the holdings of the General University Library and the specialized chemistry library in the Chemistry Building on the main campus.

Associated with each department is a Seminar Room planned to include a small relevant working library. The Department of Microbiology has accumulated a collection of over 8,000 papers on anaerobic bacteria in the form of reprints, photostatic copies, and bibliofilm copies.

Material not available in this library may be obtained through interlibrary loan from adjacent and large medical libraries throughout the country.

CLINICAL AND SPECIAL FACILITIES

In addition to the University-owned hospital and clinics the following institutions and agencies are used to a varying degree in meeting the needs of the students in the School of Medicine.

Monongalia General Hospital and Vincent Pallotti Hospital, two local general hospitals with bed capacities of approximately 120 and 100 respectively, make their

facilities available to the School of Medicine for teaching purposes by special arrangement between their administrative officers and the school.

Hopemont Sanitarium, at Hopemont, West Virginia, has approximately 400 beds primarily for pulmonary diseases, but a number of beds are set aside for other medical and surgical cases. The School of Medicine has access to this hospital for teaching purposes and the Superintendent and certain members of the staff are also members of the University staff.

Autopsy Service and Pathological Museum. Under an agreement with the coroner of Monongalia County, the Department of Pathology of the School of Medicine performs and records coroner's autopsies. Autopsies are available also for teaching purposes from the Vincent Pallotti Hospital, Monongalia General Hospital, Hopemont Sanitarium, and the private practice of physicians of the area. This arrangement provides about 200 autopsies per year, and affords increased opportunity for teaching in gross pathology.

Sundale Nursing Home. This nursing home, housing about seventy-five geriatric patients, is adjacent to the campus of the Medical Center. The staff of the department of medicine provides the basic professional service for the nursing home, which is useful in teaching many of the problems confronted by aging persons.

ORGANIZATIONS

ALUMNI ASSOCIATION

Graduates of the School of Medicine have a School of Medicine Alumni Association, devoted to the interests of students and graduates and to the encouragement of scientific and professional progress among its members and the medical profession generally.

STUDENT ORGANIZATIONS

Student American Medical Association. This organization has a chapter among the students of this school. An auxiliary provides opportunities for students wives to meet and work together.

Professional Fraternities. Phi Beta Pi and Phi Chi, national medical professional fraternities, are represented by chapters at West Virginia University School of Medicine.

LECTURSHIPS

Alumni Lectureship. Annually some outstanding physician is brought to the Medical Center under Alumni Association sponsorship to address the entire student body of the Medical School.

Gideon Stanhope Dodds Lectureship. A periodic lectureship founded by a group of alumni and friends honoring Dr. Dodds, long time professor of histology and embryology.

EXPENSES, HOUSING, FINANCIAL AID

COST OF A YEAR'S WORK

Textbooks and supplies will cost about \$90 to \$150 per academic year. For information concerning tuition and other fees, see page 12. The total legitimate cost of a nine-month session for medical students will range from \$1,110 to \$1,600 exclusive of traveling expenses.

LIVING ACCOMMODATIONS

Medical students find board and lodging in private dwellings in Morgantown. It is suggested that women contact the Office of the Dean of Women for information concerning off-campus housing. Men may obtain such information from the Information Desk in the Administration Building. All arrangements with the landlady or landlord must be made personally by the student.

It is expected that some University owned apartment-type housing for medical students will be available upon the campus of the Medical Center by mid-year 1960-61.

LOANS, SCHOLARSHIPS AND PART-TIME EMPLOYMENT

Certain loans and scholarships are available for assistance of students who are short of funds, but who are otherwise well qualified. These are administered by the Director of Student Affairs, West Virginia University, upon recommendation of the Medical School committee on loans and scholarships. Loans up to \$500 per year are available to students who have satisfactorily passed the work of the first semester in the School of Medicine. Application forms for loans are available from the Assistant Registrar, Medical Center. Application forms for scholarships may be obtained at Room 3051 Medical Center.

The West Virginia State Medical Association has established a fund from which there is granted \$1,000 each year to a deserving student in each class of the School of Medicine. Each recipient of such an award agrees to practice in a rural area of West Virginia for a period of time following the completion of his education. Information is available from the Dean of the School of Medicine.

A few part-time jobs are available on the campus and in the Medical Center. Inquiries concerning these may be made at the University Placement Service or at the Personnel Office located in the University Hospital.

ADMISSION REQUIREMENTS

Requirements for admission to the School of Medicine of West Virginia University conform to standards of the Association of American Medical Colleges and the Council on Medical Education and Hospitals of the American Medical Association.

All applications for admission are passed upon by the Committee on Admissions and Scholarship of the School of Medicine, composed of members of the medical faculty and the office of the Registrar. Admission is by recommendation of this committee and with the approval of the Dean of the School.

WHEN TO APPLY FOR ADMISSION

Application for admission in September, 1961, should be made promptly upon completion of the 1959-60 school year (June, 1960). The latest date for filing an application for September, 1961, is December 1, 1960.

HOW TO APPLY FOR ADMISSION

Application for admission must be made upon blanks which may be obtained from the Assistant Registrar, Medical Center. An unmounted photograph, 2 by 2½ inches in size, must accompany the completed application when it is submitted to the Assistant Registrar, Medical Center, West Virginia University, Morgantown, W. Va.

CREDENTIALS

Unless the applicant is a student at West Virginia University, he must ask the registrar of each college he has attended to send, directly to the Assistant Registrar, Medical Center, an official transcript of his work. The University cannot accept transcripts sent by the applicant himself. Work subsequently completed should be reported promptly to the Assistant Registrar, Medical Center.

RE-APPLICATIONS

An applicant who is refused admission or who fails to enroll after acceptance, must reapply in the regular manner if he wishes consideration for a subsequent year.

COLLEGE CREDITS REQUIRED

The council on Medical Education and Hospitals of the American Medical Association publishes a list of about eight hundred colleges which have been approved for premedical education by appropriate agencies.

Applicants from other colleges will receive consideration based upon the merits of the individual case.

Credits submitted by applicants for work done elsewhere than at West Virginia University are evaluated by the Registrar of the University and must meet the general standards set by the University for acceptance of credits by transfer.

The applicant should present a broad general education including, whenever possible, a major in some field, not necessarily a natural science. The Committee on Admissions needs evidence of excellence of academic performance and steady progress toward a goal. An excess of credit hours or higher degrees does little to offset the disadvantage of low grades in securing admission to the medical school. The practice of repeating courses to raise the grade is discouraged. Applicants who have been subject to suspension from this or other medical schools can be admitted only in very exceptional cases and at the discretion of the Committee on Admissions and Scholarship.

The requirements outlined below may be met in either of two ways: first and preferably, by pursuing a course of study leading toward a Bachelor's degree with major and minor fields of the applicant's own choosing, or secondly, by following a more rigidly prescribed curriculum generally offered as a "Pre-Medical" curriculum. In either case the applicant must have completed satisfactorily the minimum requirements listed below.

The applicant must present credit from a college of recognized standing for at least 90 semester hours of work exclusive of military science and physical education. These credits must include the following minimum requirements:

English Composition and Rhetoric 6 hr.

Biological Sciences 12 hr.
Should include 8 hours of General Zoology or 8 hours of General Biology. Comparative Vertebrate Anatomy is desirable. Vertebrate Embryology is suggested.

Chemistry 16 hr.
Must include inorganic chemistry and organic chemistry, (aliphatic and aromatic).

Physics 8 hr.

Psychology 3 hr.

Two years of modern foreign language is suggested.

MEDICAL COLLEGE ADMISSION TEST

The score on this test is used as one criterion of suitability for admission. The test is sponsored by the Association of American Medical Colleges. Tests are conducted at various centers in the Spring and Fall of each year. It is of advantage to applicants to take the test in the Spring, as many acceptances are issued before the fall test scores are available. Application to take this test must be made more than a month in advance, and students should consult their advisers about this matter at the beginning of the semester or quarter during which the test is to be taken.

PERSONAL ATTRIBUTES

Careful consideration is given to those personal qualifications which have a bearing upon fitness of the applicant for the study and practice of medicine. Students must be at least 18 years of age at the time of enrollment in the School of Medicine. Good health is a necessary qualification.

RECOMMENDATIONS

Applicants who are not students at West Virginia University should request the premedical adviser or, if there is none, one instructor in each of the departments of biology, physics, and chemistry to send a letter of recommendation to the Assistant Registrar, Medical Center.

NOTIFICATION OF APPLICANTS

All applicants will be informed of the action of the Committee on Admissions and Scholarship as promptly as possible after decisions are reached. The earliest acceptances will probably be issued in September or October.

ADVANCE DEPOSIT FEE

Each applicant is required to deposit \$25 before his name is entered upon the official list of those accepted for admission to the School of Medicine. If the applicant enrolls in the School of Medicine this sum is applied to the tuition of the first semester. If an application is withdrawn after the candidate has been offered a place and made a deposit, such deposit may be refunded at any time prior to May 15 of the year in which enrollment is anticipated. No deposit will be refunded after this date.

GENERAL RULES OF THE SCHOOL OF MEDICINE

REGISTRATION

All medical students are expected to register at the Medical Center on the days set apart for registration at the beginning of each semester.

No student will be permitted to register in the School of Medicine after the first week of classes.

Students in other colleges, school, or divisions of the University who wish to elect courses in the School of Medicine must satisfy the prerequisites for such courses and must receive permission from the Committee on Admissions and Scholarship and the professor in charge of the course.

TUITION AND OTHER FEES

All University fees are subject to change without notice.

All fees are due and payable at the Office of the Comptroller, Medical Center, on the days of registration.

Tuition Fees

	<i>Resident²</i>	<i>Nonresident²</i>
University fee (per semester)	\$133.00†	\$351.00†
Total per academic year	266.00	702.00
Part-time Students (per semester hour)	8.00	26.00

¹These fees are required of all full-time students enrolled in the University. "University Fee" includes: Mountainair Fee—\$2.00; Student Activity Fee—\$8.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

Laboratory Fees and Deposits

Breakage Deposit (per year)	10.00	10.00
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Special Fees

Registration Fee (per semester)	50.00*	50.00*
Registration Rec (per semester hour)	4.00**	4.00**
Late Registration Fee	10.00	10.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

*New registration fee, imposed by law, effective June, 1959.

**New registration fee (for part-time students), imposed by law, effective June, 1959.

¹Students who have not paid their fees before the close of office hours on the second Saturday following the opening of a semester or a summer term shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn. The second Saturday following the opening of a semester is the end of the first refund period. The second Saturday following the opening of a Summer term is the end of the refund period.

²No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction or exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover any student who has originally paid nonresident fees may become

Laboratory fee for University students not regularly enrolled in the School of Medicine: for one laboratory course, \$5.00, and for more than one laboratory course, \$10.00.

Microscopes may be rented from the Book Store at a cost of \$20.00 per semester.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all medical students must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

WITHDRAWALS

A student who wishes to withdraw from a course or from the School of Medicine during the semester should do so the regular manner. Consult the office of the Assistant Registrar, Medical Center for instructions as to withdrawal.

EXAMINATIONS

It is the policy of the various departments of the School of Medicine to conduct examinations from time to time in order that both faculty and students may be kept aware of the individual student's progress. A formal final examination is conducted at the end of each course.

In addition to these departmental examinations, which help serve as a basis for recording grades in various subjects, other examinations may be conducted at times for other purposes. At the end of the first year a comprehensive examination, designed by the entire faculty and intended to serve as a measure of adequacy of curriculum coverage, may be required. It is to be emphasized that this examination will not be used to determine a student's grade in any course or courses.

After the end of the second year, the students may be required to take Part I of the National Board of Medical Examiners Examination, which is usually given in mid-June. Since this is a school requirement, it will be without cost to the student. However, if the student wishes to utilize his score in this examination as part of his performance for certification by the National Board of Medical Examiners, he can arrange to do so by the payment of an additional fee direct to that Board. More complete information may be obtained in the office of the Dean of the School of Medicine.

PROMOTIONS AND SUSPENSIONS

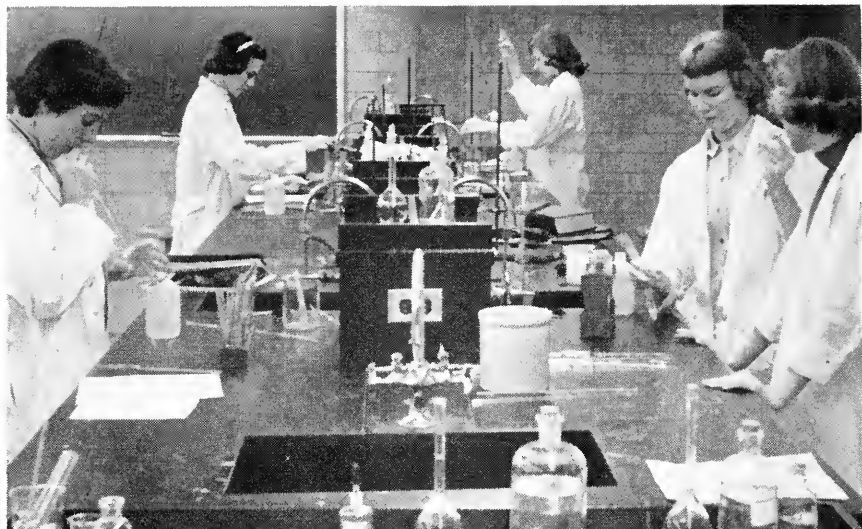
The Committee on Admissions and Scholarship of the School of Medicine is responsible for administration of the following rules. Exceptions may be made only on recommendation of this Committee. The application of rules on suspension is not automatically changed by removal of "I" grades or by the repetition of courses in other medical schools. Permission for repetition of work in this medical school may be granted only by the Committee on Admissions and Scholarship.

1. Students must register for all courses scheduled for each semester.
2. A student who does not make passing grades in at least half of the registration hours in any semester is automatically suspended (University rule).
3. A student who during any two consecutive semesters does not attain a grade-point average of 1.5 for all courses for which he is registered is thereby automatically suspended even though he may pass in all courses.
4. No student will be permitted to register for work of the second or any subsequent year until all courses for the prior year have been completed.

INCOMPLETE COURSES

The grade of "I" is given when the instructor believes the work is unavoidably incomplete or that a supplementary examination is justifiable. If a grade of "I"

entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.



MEDICAL Technology students study to become responsible laboratory workers and supervisors in hospitals, clinics, and physicians' offices. Students spend first two years in College of Arts and Sciences, where they take basic courses in chemistry, zoology, physics, English, and a scientific language.

is not removed before the end of the next semester in which the student is in residence, by satisfactory completion of the work, it becomes a failure unless special permission to postpone the work is obtained from the Committee on Admissions and Scholarship (University Rule).

It is the responsibility of the student to consult the instructor about the means and schedule for making up incomplete courses.

DEPARTURE FROM SCHEDULED WORK

Medical students must register for all prescribed courses for each semester except by special permission from the Committee on Admissions and Scholarship of the School of Medicine. This permission is not valid until it has been reported to the Assistant Registrar, Medical Center for record.

DEGREES

The degree of *Doctor of Medicine* (M.D.) will be granted, beginning in the spring of 1962, to those students who have completed the prescribed curriculum and who have been recommended for the degree by the faculty of the School of Medicine.

The degrees of *Master of Science* (M.S.) and *Doctor of Philosophy* (Ph.D.) are offered by certain departments of the School of Medicine. Properly qualified University graduate students are eligible. For complete information consult the Chairman of the Committee on Graduate Studies in the School of Medicine or see the *Announcements* of the Graduate School.

Admission to the Graduate School of West Virginia University does not of itself assure permission to take courses in departments of the School of Medicine. Persons wishing to take any courses in the School of Medicine for graduate credit should consult the Chairman of Graduate Study in the School of Medicine and the department concerned well in advance of registration day.

CURRICULUM REVISION

The curriculum of the School of Medicine is constantly under study by a special committee and by all members of the faculty. In the interests of offering the best possible course of instruction, curriculum revisions are made from time to time.

COURSES OF INSTRUCTION

In this catalog all courses designated by the Roman numeral III, the clinical clerkships, are required of third-year medical students. (See page 16.)

The following abbreviations are used:

- I—a course given in the first semester.
- II—a course given in the second semester.
- I, II—a course given in each semester.
- Yr.—a continuous course extending through two semesters.
- conc.—concurrent registration required.
- S—a course given in the Summer Session.
- hr.—number of credit hours per course.

For convenience each course is designated by the name of the department offering the courses and the number of the course. The plan for numbering courses at West Virginia University is as follows:

Courses 1 to 99—offered primarily for freshmen and sophomores

Courses 100 to 199—offered primarily for juniors and seniors

Courses 200 to 299—advanced courses for juniors, seniors, and graduates

Courses 300 to 399—offered to graduates only

In addition to required courses there are listed some elective courses for the benefit of other University students who may need them. They are given only when, in the opinion of the department concerned and of the Dean, it is considered advisable. If there should arise a demand for any of these courses, the School of Medicine will try to meet the need, but the schedule will be contingent upon the extent to which staff members are occupied with the required medical courses. For full information, see *Announcements of the Graduate School*.

BIOCHEMISTRY

Professor KRAUSE; Associate Professors LOTSPICH and SHELTON; Assistant Professors GANGLOFF and CANADY; Instructor KINLEV; Clinical Instructor NELSON.

- 231. BIOCHEMISTRY. (For Medical students.) I, 7 hr. PR: Organic Chemistry. Lect. 4 hr., lab. 8 hr. per week.
- 237. SEMINAR IN BIOCHEMISTRY. I, II, 1-6 hr. (1 hr. per sem.) PR or Conc: Biochem. 231. Presentation and discussion of special topics.
- 239. CLINICAL CHEMICAL TECHNIQUES. II, 4 hr. PR: Biochem. 139 or 231. (Primarily for medical technology students; open to other qualified students.) A laboratory course designed to study chemical techniques used in clinical laboratories.
- 330. BIOCHEMICAL PREPARATIONS. I, II, 2-5 hr. PR: Biochem. 231 or equiv. Emphasis on biochemical methods.
- 332. ENZYME KINETICS. II, 3 hr. PR: Biochem. 139 or 231. Primarily for graduate students or other properly qualified students. An introduction to the physical mechanisms of enzyme action.
- 333. RESEARCH IN BIOCHEMISTRY. I, II, S, 1-6 hr. PR: Biochem. 231 or equiv.
- 337. BIOCHEMISTRY OF THE AMINO ACIDS AND PROTEINS. I, 3 hr. PR: Agr. Biochem. 290 or Med. Biochem. 231. Advanced study of the amino acids and proteins. Offered in 1961-62 and every third year thereafter.
- 338. HORMONES, NATURE AND ACTION. I, 2 hr. PR: Agr. Biochem. 290 or Med. Biochem. 231.

GROSS AND NEUROLOGICAL ANATOMY

Professor JOHNSON, Associate Professors BOYER and HEWES; Instructor GOODGE; Clinical Instructors SHAFFER and SMITH.

201. GROSS ANATOMY. I, 6 hr. PR: Gen. Zool. and consent. The gross anatomy of the human body studied by a complete dissection. Required of candidates for advanced degrees from this department. Lect. 3 hr., lab. 6 hr. per week.
202. GROSS ANATOMY. II, 6 hr. PR: Anat. 201. Continuation of Anat. 201. Required of candidates for advanced degrees from this department. Lect. 3 hr., lab. 6 hr. per week.
203. NEUROANATOMY. II, 4 hr. PR: Consent. The gross and microscopic structure of the central nervous system. Required of candidates for advanced degrees from this department. Lect. 2 hr., lab. 4 hr. per week.
301. ADVANCED GROSS ANATOMY. I, II, S. 2-6 hr. PR: Gross Anat. 201, 202, and consent. A morphological and functional analysis of a selected region. With dissection.
302. ADVANCED DEVELOPMENTAL ANATOMY. I, II, S. 2-6 hr. PR: Gross Anat. 201, 202, and consent. Developmental anatomy carried through the fetal, neonatal, and childhood periods with particular attention to variations and malformations. Lectures and dissection of the fetus and infant. Required of candidates for advanced degrees from this department.
303. SEMINAR. I, II, S. 1-6 hr. PR: Consent. Selected areas of study, including historical aspects.
304. APPLIED ANATOMY. I, II, 2-6 hr. PR: Anatomy 201, 202, and consent. A regional study intended primarily for physicians and surgeons.
350. RESEARCH IN GROSS AND NEUROLOGICAL ANATOMY. I, II, S. 1-6 hr. PR: Gross Anat. 201, 202, Neuroanat. 203.

MEDICINE

Professor FLINK; Associate Professors LAWLESS and SLEETH; Assistant Professor HARLEY; Clinical Assistant Professors MAXWELL, STARKEY, and WHITTLESEY; Instructor ANDERSON; Clinical Instructors JOHNSON, NOTTINGHAM, and STOUT.

275. HISTORY OF MEDICINE. I, 1 hr. A brief history of the development of the science and art of medicine. Lect. 1 hr. per week.
277. CORRELATION CLINIC. I, 1 hr. Practical demonstrations of the relation of the basic sciences to clinical medicine using the case method. Members of the various basic sciences departments participate in cooperation with members of the Department of Medicine.
278. CORRELATION CLINIC. II, 1 hr. A continuation of Med. 277.
291. PHYSICAL DIAGNOSIS. II, 1 hr. Practical experience in examination of normal and abnormal subjects.
293. INTRODUCTORY MEDICINE. I, 1 hr. Lectures and demonstrations of patients exhibiting cardinal manifestations of disease and specific disease entities.
294. INTRODUCTORY MEDICINE. I, 1 hr. A continuation of Med. 293. Includes an introduction to the principles of Pediatrics.
- III. CLINICAL CLERKSHIP IN MEDICINE. Yr. Credit. Required of third-year Medical students. The individual student is assigned responsibility for specific patients from the hospital or out-patient service of the respective department in which he is serving at the time. He becomes an integral part of the team providing the diagnostic and treatment services needed by the patient under direct supervision of members of the faculty of the department. The student elicits the patient's history, performs physical examinations and performs or secures indicated laboratory studies. The student records his findings and presents case reports for discussions by members of the faculty during hospital rounds or

out-patient clinics. In addition to this individual work, the student attends such lectures or other "whole-class" exercises as are regularly scheduled by the respective departments.

MICROBIOLOGY

Professor SLACK; Associate Professor HARRELL; Assistant Professors DYSON, HALL, and MASCOLI.

- 221. MICROBIOLOGY. I. 6 hr. PR or conc: Organic chem. Biochem. desirable. Detailed study of the pathogenic microorganisms. Lect. 3 hr., lab. 9 hr. per week.
- 222. PARASITOLOGY. II. 2 hr. PR: Consent. Introduction to animal organisms as human pathogens and vectors of disease. Lect. 1 hr., lab. 2 hr. per week.
- 223. PATHOGENIC MICROBIOLOGY. (For Med. Tech. students.) II. 5 hr. PR or conc: Organic chem. A detailed study of pathogenic microorganisms. Lect. 3 hr., lab. 6 hr. per week.
- 224. PARASITOLOGY. (For Med. Tech. students.) II. 4 hr. PR: Consent. Study of animal parasites and vectors of disease. Lect. 3 hr., lab. 3 hr. per week.
- 227. SPECIAL PROBLEMS IN MICROBIOLOGY. I, II, S. 1-6 hr. PR: Microbiol. 221 or equiv.
- 228. DIAGNOSTIC OR DETERMINATIVE MICROBIOLOGY. I, II, S. 1-6 hr. PR: Microbiol. 221 or equiv. Arranged. Diagnostic procedures as aids to diagnosis of human diseases and methods for the identification of microorganisms.
- 321. BACTERIAL PHYSIOLOGY. I. 4 hr. PR or conc: Microbiol. 221 or equiv., Biochem. Physiological studies on the bacterial cell, growth, and death of bacteria, and effect of antibacterial agents on bacteria. Lect. 2 hr., lab. 4 hr. per week.
- 322. BACTERIAL METABOLISM. I 4 hr. PR: Microbiol. 321. Studies of the major metabolic pathways of bacteria. Lect. 2 hr., lab. 6 hr. per week.
- 323. IMMUNOLOGY. II. 4 hr. PR: Microbiol. 221 or equiv. A thorough study of antigens, antibodies, and their reactions both *in vitro* and *in vivo* and including the hypersensitivity phenomenon. Lect. 2 hr., lab. 6 hr. per week.
- 324. VIROLOGY. II. 4 hr. PR: Microbiol. 221 or equiv. A study of human, animal, and bacterial viruses. Lect. 3 hr., lab. 4 hr. per week.
- 325. MEDICAL MYCOLOGY. I. 3 hr. PR: Microbiol. 221 or equiv. Mycology 203 and 330 are recommended. A study of the fungi which infect humans with emphasis on isolation and identification. Lect. 1 hr., lab. 4 hr. per week.
- 326. SEMINAR. I, II, S. 1-6 hr. PR: Microbiol. 221 or equiv. Will include history of microbiology.
- 327. RESEARCH IN MICROBIOLOGY. I, II, S. 1-6 hr. PR: Microbiol. 221 or equiv.

MICROANATOMY AND ORGANOLOGY

Professor WILLIAMS; Associate Professors HIGGINBOTHAM and REYER.

- 205. MICROANATOMY AND ORGANOLOGY. I. 1 hr. PR: General zoology or equiv. Structure, function, and embryology of tissues and organs. Lect. 3 hr., lab. 6 hr. per week.
- 305. EXPERIMENTAL EMBRYOLOGY. II. 3 hr. PR: Biochem., Embryology, Microanat. 205, and consent. An analysis of development, differentiation, and regeneration.
- 351. ADVANCED MICROANATOMY AND ORGANOLOGY. I, II, S. 2 hr. PR: Microanat. 205 or equiv.
- 352. RESEARCH IN MICROANATOMY AND ORGANOLOGY. I, II, S. 2-12 hr. PR: Microanat. 351 and consent.
- 353. SPECIAL PROBLEMS IN MICROANATOMY. II. 2-4 hr. PR: Microanat. 205 or equiv., consent.

OBSTETRICS AND GYNECOLOGY

Professor FUGO; Faculty (to be appointed).

296. OBSTETRICS, II, 2 hr. PR: Human anatomy, Physiol. 241, Path. 251. An introductory course in obstetrics. Lect. 2 hr. per week.
- III. CLINICAL CLERKSHIPS IN OBSTETRICS AND GYNECOLOGY. Yr. Credit. Required of third-year Medical students. See description of clinical clerkships under Medicine III, page 16.

PATHOLOGY

Professor HOBBS; Clinical Associate Professor EHRGOTT; Assistant Professors LOVE and STUART; Instructor ARGIO.

150. ELEMENTARY HISTOLOGY, I, 3 hr. A study of the elements of histological structure, including blood. Required of Med. Tech. students, may be taken by others if approved by the Department. Lect. 2 hr., lab. 3 hr. per week.
151. CLINICAL LABORATORY DIAGNOSTIC METHODS, I, II, 4 hr. Study of blood, exudates, transudates, gastric contents, urine, etc. Required of Med. Tech. students, may be taken by others if approved by Department. Lect. 2 hr., lab. 6 hr. per week.
251. GENERAL AND TUMOR PATHOLOGY, I, 6 hr. PR: Consent. Includes gross and microscopic studies with demonstrations. Lect. 4 hr., lab. 10 hr. per week.
252. SPECIAL PATHOLOGY, II, 2 hr. PR: Consent. A study of special diseases with gross and microscopic specimens from selected autopsies. Lect. 1 hr., lab. 2 hr. per week.
251. CLINICAL PATHOLOGY, II, 3 hr. PR: Consent. A laboratory course in blood, gastric contents, urine, etc., and their pathological and clinical significance. Lect. 2 hr., lab. 6 hr. per week.
256. ADVANCED PATHOLOGY, I, II, 3 hr. PR: Consent. Microscopic and gross specimens from selected autopsies.
351. RESEARCH, I or II, 1-6 hr. Open to properly qualified students.

PEDIATRICS

Professor KLINGBERG; Faculty (to be appointed).

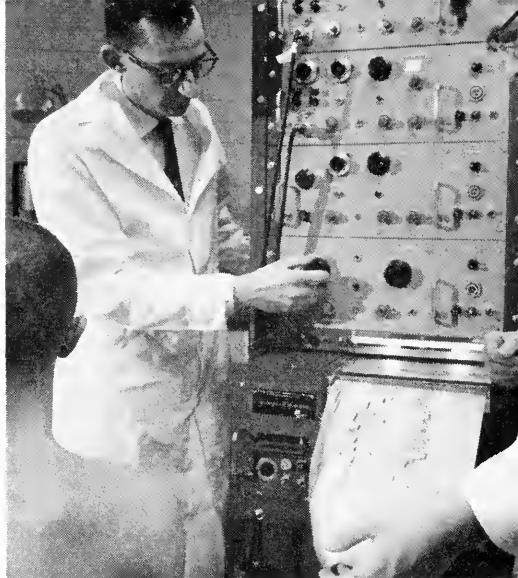
- III. CLINICAL CLERKSHIP IN PEDIATRICS. Yr. Credit. Required of third-year Medical students. See description of clinical clerkships under Medicine III, page 16.

PHARMACOLOGY

Professor WAITS; Associate Professors KENNY and SAXE; Assistant Professor FLEMING; Instructor ROBINSON; Lecturer TUCKER.

262. MEDICAL PHARMACOLOGY, II, 6 hr. PR: Physiology, Chemistry, pharmacodynamics, toxicology, therapeutic use, and dosage of drugs. Lect. 5 hr., lab. 6 hr. per week.
265. SEMINAR, I, II, 1 hr. per sem. PR: Consent.
360. SPECIAL TOPICS IN PHARMACOLOGY, I, II, S, 1-6 hr. per sem. PR: Pharmacol. 262 or equiv. Assigned study in pharmacodynamics, autonomic and cardiovascular pharmacology, chemotherapy, bioassay, and biochemistry of drug action.
362. ADVANCED PHARMACOLOGY, I, II, S, 1-6 hr. per sem. PR: Pharmacol. 262. Lectures and laboratory study in advanced phases of pharmacology; development of research techniques.
367. RESEARCH IN PHARMACOLOGY, I, II, S, 1-6 hr. per sem. PR: Pharmacol. 262 or equiv.

WITH the complete facilities and competent staff of its Medical Center, West Virginia University offers a medical education that is among the best that can be obtained anywhere. Faculty members combine research and teaching, are leaders in their field.



PHYSIOLOGY

Professors NORTHUP, PENROD, STICKNEY, and VAN LIERE; Assistant Professor LINDSAY; Instructor GLADELLIER.

- 241. PHYSIOLOGY. II. 9 hr. PR: Comparative anatomy, biochemistry. A study of the functions of organs. Lect. 7 hr., lab. 8 hr. per week.
- 244. SEMINAR IN PHYSIOLOGY. Yr. 1-6 hr. PR: Graduate status.
- 340. SPECIAL TOPICS. I, II, S. 1-12 hr.
- 342. ADVANCED PHYSIOLOGY. I, II, S. 1-6 hr. per sem. PR: Physiol. 241 or equiv. Historical review, discussion of late developments.
- 346. RESEARCH IN PHYSIOLOGY. I, II, S. 1-12 hr.

PSYCHIATRY

Chairman (to be appointed); Faculty (to be appointed).

- III. PSYCHIATRY FOR THIRD-YEAR MEDICAL STUDENTS. Yr. Credit. Lectures, demonstrations, small group and individual instruction in psychobiology and psychopathology, mechanisms of mental disease, techniques of interviewing, etc.

PUBLIC HEALTH AND PREVENTIVE MEDICINE

Chairman (to be appointed); Faculty (to be appointed); Lecturer VIGGIANO.

- 290. HEALTH AND PREVENTIVE MEDICINE. II. 2 hr. PR: Consent. Introduction to principles of public health. Lect. 2 hr. per week.
- III. HEALTH AND PREVENTIVE MEDICINE FOR THIRD-YEAR MEDICAL STUDENTS. Yr. Credit. Students will attend lectures and demonstrations and participate in field work concerned with the practical application of knowledge in the fields of public hygiene and preventive medicine.

RADIOLOGY

Professor AMORY; Faculty (to be appointed).

SURGERY

Professors ZIMMERMAN and JONES; Clinical Professors PICKETT and C. B. PRIDE; Associate Professors MILAM and WARDEN; Clinical Associate Professors GERWIG; Clinical Assistant Professors HUSKILL, M. PRIDE; Instructor MORAN; Clinical Instructor CATHIE; Resident Physicians MAXIMI and TARNAY.

281. PRINCIPLES OF SURGERY. I. 1 hr. Lectures and demonstrations of fundamentals of surgery. 2 hr. per week.
282. PRINCIPLES OF SURGERY AND SURGICAL ANATOMY. II. 2 hr. Demonstrations of operative techniques; lectures and demonstrations of the importance of anatomy to clinical surgery. 2 hr. per week.
- III. CLINICAL CLERKSHIP IN SURGERY. Yr. Credit. Required of third-year Medical students. See description of clinical clerkships under Medicine III, page 16.



STUDENTS in Medical Technology spend their junior years at the Medical Center, where they study and practice the techniques and procedures used in medical testing laboratories. Here a student, working with laboratory animals, conducts experiment to demonstrate optimum atmosphere for comfort, health.

II. Curriculum in Medical Technology

COMMITTEE ON MEDICAL TECHNOLOGY

M. L. HOBBS (Professor of Pathology), Chairman
W. A. EHRGOTT (Associate Professor of Pathology)
W. K. HARRELL (Assistant Professor of Microbiology)
E. C. GANGLOFF (Assistant Professor of Biochemistry)
B. F. LOVE (Technical Director of Curriculum in Medical Technology)
D. W. NORTHRUP (Professor and Chairman of Physiology)
Lyle E. Herod (Assistant Registrar, Medical Center)

GENERAL INFORMATION

The curriculum in Medical Technology leads to the degree of Bachelor of Science (Medical Technology). This curriculum prepares students to serve as medical technologists in hospitals, clinics, research laboratories, and in private and public health laboratories.

Training standards for medical technologists are under general supervision of the Council on Medical Education and Hospitals of the American Medical Association. Properly qualified graduates, upon passing the required examinations, may be eligible for certification by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists.

The curriculum in Medical Technology, leading to the Bachelor of Science Degree, requires two years. Admission to this curriculum is based upon two years of collegiate work, including the required subjects, as fully described below. This work may be taken in any institution of recognized standing. The College of Arts and Sciences of West Virginia University offers a pretechnology program under the supervision of the premedical adviser.

In the third and fourth years the student is under the jurisdiction of the School of Medicine, but no course taken during these years may be counted toward the M.D. Degree.

The work of the last year is largely individual in nature, carried on in laboratories and hospitals. The students are considered as temporary members of the laboratory staff and are subject to the usual regulations and discipline of the regular staff. This work occupies one entire calendar year of twelve months.

REQUIREMENTS FOR ADMISSION

For admission to the curriculum in Medical Technology, the applicant must have graduated from high school and present at least 15 units of high school work acceptable to the University, including one unit in elementary algebra and one unit in plane geometry.

COLLEGE CREDITS REQUIRED

Two years of college work with a total of 67 hours, exclusive of military science, as specified below:

English, 12 semester hours. (Must include 6 hours composition and rhetoric and 6 additional hours in literature.)

Modern Foreign Language, 12 hours.

Biological Science, 8 hours. (General Zoology or General Biology are acceptable.)

Chemistry, 16 hours. (Inorganic Chemistry, 8 hours; Quantitative Analysis, 4 hours; Organic Chemistry, 4 hours.)

Physics, 8 hours.

Physical Education, 4 hours for women, 2 hours for men. (University requirements for students taking first two years in residence.)

Elective to complete the required hours. Electives should be in the fields not covered in the required subjects. Algebra is strongly recommended. Student should avoid subjects included in the work of the third year, such as bacteriology, organic chemistry and comparative anatomy.

OTHER QUALIFICATIONS

Only a limited number of students can be accommodated in the Curriculum in Medical Technology. Completion of the two-year pretechnology program outlined above does not of itself assure admission to the third year for the technical training. Students wishing to be considered for this work should make application upon forms which may be obtained from the Assistant Registrar, Medical Center. Application should be made in February of the second pre-technology year. When applying, unless he is in residence at West Virginia University, the student should request the registrar of his college to send an official transcript of his work to the Assistant Registrar, Medical Center.

Admission is on recommendation of the Committee on Medical Technology and with the approval of the Dean of the School of Medicine. Notification will be sent after April 1.

Preference is given to residents of West Virginia. Scholarship and general fitness are considered in selecting students. Applicants from institutions other than West Virginia University should request letters of recommendation from two responsible faculty members who are qualified to write concerning them.

IMMUNIZATIONS

The School of Medicine requires that during the first semester of the first year all students in Medical Technology must complete certain prescribed immunizations and diagnostic procedures. These are administered without charge by the University Health Service.

TUITION AND OTHER FEES

All University Fees are subject to change without notice. Students in Medical Technology pay the following fees in their junior and senior years. All fees are due and payable at the Office of the Comptroller, Medical Center, on the days of registration.³

Tuition Fees

	<i>Resident¹</i>	<i>Nonresident¹</i>
University Fee (per semester)	\$ 71.00†	\$246.00†
Total per academic year	142.00	492.00
Summer (per semester hour) ²	5.00	17.00

¹These fees are required of all full-time students enrolled in the University. "University Fee" includes: Mountlair Fee—\$2.00; Student Activity Fee—\$8.00; Health Service Fee—\$3.00; and Student Union Building Fee—\$3.00.

Laboratory Fees and Deposits

Breakage Deposit (per year)	10.00	10.00
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Special Fees

Registration Fee (per semester)	50.00*	50.00*
Registration Fee (per semester hour)	4.00**	4.00**
Late Registration Fee	10.00	10.00
Graduation Fee	10.00	10.00
Student Record Fee	1.00	1.00

*New registration fee, imposed by law, effective June, 1959.

**New registration fee (for part-time students), imposed by law, effective June, 1959.

³Students who have not paid their fees before the close of office hours of the second Saturday following the opening of a semester or a summer term shall be dropped from the rolls of the University, and the Registrar shall notify their instructors that their class cards are to be withdrawn. The second Saturday following the opening of a semester is the end of the first refund period. The second Saturday following the opening of a Summer term is the end of the refund period.

⁴No person shall be considered eligible to register in the University as a resident student who has not been domiciled in the State of West Virginia for at least twelve consecutive months next preceding college registration. No non-resident student may establish domicile in this State, entitling him to reduction of exemptions of tuition, merely by his attendance as a full-time student at any institution of learning in the State. A minor student whose parents acquire a

Laboratory fee for University students not regularly enrolled in the School of Medicine: for one laboratory course, \$5.00, and for more than one laboratory course, \$10.00.

Microscopes may be rented from the Book Store at a cost of \$20.00 per semester.

REQUIREMENTS FOR THE DEGREE

The degree, Bachelor of Science (Medical Technology), will be given upon completion of the curriculum outlined below.

The administration of scholarship standards is in charge of the Committee on Medical Technology. The following rules apply:

A student who does not make passing grades in at least half of the registration hours during any semester is automatically suspended. (General University rule.)

Eligibility to begin work of the fourth year is contingent upon the demonstration of personal aptitude for this work and upon full completion of the curriculum of the third year. The grade-point average for the third year must be at least 1.5 per registration hour.

Before being accepted in the fourth year clinical phase of medical technology, an approved transcript evaluation from the Registry of Medical Technologists of the American Society of Clinical Pathologists, Muncie, Indiana, must be on file in the office of the Assistant Registrar, Medical Center.

JUNIOR YEAR

During the third and fourth years the student is under the jurisdiction of the School of Medicine. This part of the curriculum is open only to students approved by the Committee on Medical Technology.

During the first year of enrollment in the School of Medicine students must take the University examination to test proficiency in English, unless this requirement has been satisfied previously.

<i>First Semester</i>	<i>Hr.</i>	<i>Second Semester</i>	<i>Hr.</i>
Comparative Anatomy 231	5	Parasitology 255	4
Pathology 150	3	Microbiology 223	5
Biochemistry 139	4	Biochemistry 239	4
Physiology 141	4	Pathology 151	4

SENIOR YEAR

Work of the fourth year consists of practical experience under careful supervision in laboratories and hospitals. At present this training is given in the Department of Pathology of West Virginia University, the State Hygienic Laboratory, the Charleston General Hospital, and Fairmont General Hospital. The work covers the subjects listed below although these separate fields of training cannot be given in sequence as separate courses. This work continues throughout an entire calendar year. Students register in the University for a Summer Session (about 15 weeks) in addition to two regular semesters.

The professional courses required of fourth-year students follow:

100. LABORATORY PRACTICES. Summer term. 1 hr. Based upon the experience of the initial summer of the fourth year.
101. APPLIED BACTERIOLOGY. Yr. 4 hr. Methods of sterilization, preparation of culture media and vaccines, staining and study of bacteria, etc.

West Virginia domicile after the student's original registration will be deemed to have the domicile of his parents and become entitled to pay resident fees. Moreover any student who has originally paid nonresident fees may become entitled to pay resident fees, if after an interim of nonattendance or otherwise he has established a valid legal domicile in this State at least twelve months prior to his registration in the University. In any event, the appointment of a guardian for a minor student temporarily resident in West Virginia, other than the designation of a natural guardian, shall not in and of itself operate to establish a West Virginia domicile for such student.

⁵In addition, Mountainlair Fee \$.75 per term and Student Union Building Fee \$1.00 per term for full-time students.



102. APPLIED PARASITOLOGY. Yr. 2 hr. Examination of feces for parasites and ova and of blood smears for parasites of the blood.
103. APPLIED SEROLOGY. Yr. 4 hr. Agglutination, precipitation, and complement fixation tests in serodiagnosis of syphilis and other diseases.
104. CLINICAL CHEMISTRY. Yr. 3 hr. Chemical examination of urine, blood, gastric contents, and spinal fluid for abnormal constituents and increased or decreased amounts of normal constituents.
105. ELECTROCARDIOGRAPHY. Yr. 2 hr. Study of the electrocardiograph machine and its practical employment on patients.
106. METABOLIMETRY. Yr. 2 hr. Study of the metabolism of carbohydrates, proteins, fats, minerals, etc., and the technique of basal metabolism.
107. MICROTECHNIQUE. Yr. 3 hr. Histological technique including paraffin, celloidin, and frozen sections with routine and special staining procedures.
108. NORMAL HEMATOLOGY. Yr. 4 hr. Methods of obtaining blood, hemoglobin determinations, enumeration of erythrocytes, leucocytes, and blood platelets; study of stained blood films, etc.
109. SPECIAL HEMATOLOGY. Yr. 3 hr. Study of blood dyscrasias, hemorrhagic diseases, blood groups, etc.
110. RECORD KEEPING. Yr. 3 hr. Study of laboratory and hospital forms with proper methods of recording findings and filing laboratory reports.
111. URINE ANALYSIS. Yr. 5 hr. Clinical examination of normal and abnormal urines including general characteristics, qualitative and quantitative chemical analyses, microscopic studies, renal-function tests, etc.

APPLIED serology, parasitology, metabolimetry, and hematology are courses studied in the senior year by Medical Technology students.

SENIOR year in Medical Technology is on-the-job training at hospital and hygienic laboratories in Fairmont, Charleston, and Morgantown.



III. GENERAL UNIVERSITY INFORMATION

ADMISSION

General requirements for admission to West Virginia University are stated in detail in the West Virginia University *General Catalog*. Admission to the School of Medicine and to the Curriculum in Medical Technology are fully covered in Parts I and II of this bulletin.

Entrance units required for admission, admission as special students, advanced standing, and credits accepted from a junior college are also explained in detail in the *General Catalog*.

REGISTRATION

All University students are expected to register on those days set aside on the University Calendar for registration. Fees are subject to change without notice, and are due and payable at the time of registration. Students in medicine and juniors and seniors in medical technology register at the Medical Center and pay fees at the Office of the Medical Center Comptroller. Fees and deposits are covered in full in the University *General Catalog*, and in Parts I and II of this bulletin.

OTHER ACADEMIC REGULATIONS

All regulations pertaining to student conduct, withdrawal, grades, honors, requirements for graduation, etc., are covered in detail in the *General Catalog*. Students who have specific problems in any of these areas should contact their advisers for assistance.

THE UNIVERSITY HEALTH SERVICE

The University Health Service provides medical service to all students in the University and supervises health conditions on the campus. Each regularly enrolled University student pays a fee which provides for medical consultation and advice from University physicians. A moderate additional charge is made for room calls, X-rays, special laboratory tests, operations, treatment of fractures, intravenous treatment, and drugs furnished by the University pharmacy.

Regulations pertaining to the University Health Service are carried in detail in the *General Catalog*.

MEDICAL STUDENTS 1959-1960

FIRST YEAR STUDENTS (ENROLLED SEPTEMBER 1959)

Bazo, Albert James (B.S., West Liberty State College, 1959)	Triadelphia
Bivens, Spencer Lee, Jr. (A.B., West Virginia University, 1959)	Charleston
Bliffin, Gary Drannon (A.B., West Virginia University, 1959)	Monaville
Bounesen, Charles Henry (A.B., West Virginia University, 1959)	Wheeling
Brassine, William Florent (A.B., West Virginia University, 1959)	Clarksburg
Bryant, James Lee, II (A.B., West Virginia University, 1959)	Belle
Chapman, David Anderson (A.B., West Virginia University, 1958)	Mt. Hope
Craycraft, Larry Burns (B.S., West Virginia University, 1959)	Kenova
Dobbs, Frederick Henry, II (A.B., West Virginia University, 1959)	Charleston
Donahoe, Dorval Hendrix (B.S., West Virginia University, 1959)	Chapmanville
Evans, Nicholas George (A.B., University of Pittsburgh, 1959)	Clarksburg
Fowler, Donald Richard (B.S., Washington and Lee University, 1958)	Parkersburg
Fullmer, John Lee (B.S., West Virginia University, 1959)	Reedsville
Gustke, Robert Fred (A.B., West Virginia University, 1958)	Parkersburg
Hash, Volney Wade, Jr. (B.S., Concord College, 1959)	Athens
Hughes, Charles Vincent, Jr. (B.S., Wheeling College, 1959)	Wheeling
Johnson, Randall Edward	Williamson
Kandzari, Stanley Joseph (A.B., West Virginia University, 1959)	Mona
Kopp, James Emidio (A.B., West Virginia University, 1959)	Clarksburg
Larese, Ricci Joe (A.B., Duke University, 1958)	Kimball
McBride, John William (B.S., West Virginia Wesleyan, 1959)	Parkersburg
McConnell, Mary Rebecca (B.S., Madison College, 1959)	Wheeling
McCoy, James Edward, Jr. (A.B., West Virginia University, 1958)	Bluefield
McMurray, John Thomas (B.S., Duquesne University, 1959)	Mannington
Mouser, Lowell Thomas	Minnehaha Springs
Naum, George Phillip (A.B., B.S., Marshall College, 1958)	Wheeling
Pharr, Percy Paul, Jr. (A.B., West Virginia University, 1959)	Bramwell
Pushkin, Jack (A.B., M.S., West Virginia University, 1958, 1959)	Charleston
Richmond, Richard Dale (B.S., Kent State University, 1957)	Beckley
Sanford, Okey Homer	Rainelle
Smith, Barry Malcolm (B.S., Shepherd College, 1958)	Charles Town
Smith, Charles Elton, Jr. (A.B., Duke University, 1955)	Charleston
Smith, David Earl (A.B., West Virginia University, 1959)	Bluefield
Stevens, Roy James (A.B., West Virginia University, 1959)	Morgantown
Swartz, Donald Reed (A.B., Earlham College, 1959)	Morgantown
Tallman, Terry Tyrone	Alma
Thompson, Richard Melville (A.B., West Virginia University, 1959)	Beckley
Tompkins, Grover Robert (A.B., Duke University, 1959)	Charleston
Turner, Charles Edward (A.B., Marshall College, 1959)	Huntington
Vaughan, John William (A.B., West Virginia University, 1959)	St. Albans
Vinall, Sidney Alex (A.B., West Virginia University, 1959)	Wheeling
Wallace, David Earl (B.S., Morris Harvey College, 1959)	Madison
Weisberg, Edward Saul (A.B., West Virginia University, 1959)	Charleston
Wolford, Keith Harlow (B.S., West Virginia University, 1959)	Romney
Young, Robert Gene (A.B., West Virginia University, 1959)	Montgomery

SECOND YEAR STUDENTS

Arnold, Richard Byron (A.B., Marshall College, 1959)	Huntington
Ashworth, Halbert Eugene (A.B., Duke University, 1956)	Charleston
Barile, John Lee (A.B., West Virginia University, 1958)	Clarksburg
Bowman, Robert Lee (B.S., Marshall College, 1957)	Fairmont
Calhoun, Joseph Harlan (A.B., West Virginia University, 1958)	Moorefield
Cooley, Frederick Morton	Nitro
Cutlip, Basil Duncan, Jr. (A.B., West Virginia University, 1958)	Webster Springs
Dickenson Donald Cobb (A.B., West Virginia University, 1958)	Princeton
Gaziano, Dominic (A.B., West Virginia University, 1958)	Pemberton
Goad, Francis Arthur (A.B., West Virginia University, 1958)	Clendenin
Griffith, Jesse Samuel	Charleston
Gross, Stanley Burton (A.B., M.S., West Virginia University, 1954, 1957)	Morgantown

Harris, William Kiley (A.B., West Virginia University, 1958)	Morgantown
Hemmings, Ira Lawrence, Jr.	Charleston
Jordan, Jon Lyle (A.B., West Virginia University, 1958)	Oak Hill
Jordan, William Gregor (B.S., Alderson-Broadbudd College, 1957)	Oak Hill
Kern, Marguerite Ann	Welch
Ladwig, Charles Lloyd, Jr. (A.B., West Virginia University, 1958)	Lost Creek
Lewis, Charles William (B.S., Marshall College, 1958)	Huntington
Mosrie, Azett Jimmie (A.B., Duke University, 1958)	Princeton
Moss, Hubert Vencil (A.B., West Virginia University, 1959)	Weirton
Nassif, Thomas John (A.B., West Virginia University, 1958)	Rowlesburg
Neale, Spottswood Pryor (B.S., Davidson College, 1958)	Princeton
Nelson, George Humphrey (A.B., College of Charleston, 1951; M.S., Ph.D., Medical College of South Carolina, 1953, 1955)	Morgantown
Rashid, Richard	Charleston
Reed, Joseph Blount (A.B., West Virginia University, 1957)	Burlington
Ruggiero, Joseph (B.S., Fairmont State College, 1958)	Fairmont
Schmid, William Henry (A.B., West Virginia University, 1958)	Benwood
Schmidt, James Lee (A.B., West Virginia University, 1958)	Morgantown
Shaffer, Kenneta Jean (A.B., West Virginia University, 1959)	Morgantown
Steele, Ida May Hogshead (B.S., M.S., West Virginia University, 1948, 1949)	Montgomery
Steele, James Lebrecht (A.B., West Virginia University, 1957)	Bartley
Stephens, Pete Louis (B.S., Bethany College, 1959)	Weirton
Waring, Watson Glenn (B.S., Washington and Lee University, 1958)	Beverly
White, David Lee (A.B., West Virginia University, 1957)	Morgantown
Zakaib, Edward Albert (A.B., West Virginia University, 1959)	Charleston

STUDENTS IN MEDICAL TECHNOLOGY

MEDICAL TECHNOLOGY I (JUNIORS) 1959-1960

Jane Chatfield	Charleston
Vanessa Dillon	St. Albans
Carol Dobbins	Quinwood
Cherrill Dugan	Arthurdale
Marta Henderson	Summersville
J. Kay Lawson	Sophia
Loverine Phillips Reed (Mrs.)	Cameron
Peggy Whystell	Rockdale
Nancie Graham (special)	Clarksburg

MEDICAL TECHNOLOGY II (SENIORS) 1959-1960

Ruth Clise	Enterprise
Robert Orndorff	Charles Town
Janet Peters	Wheeling
Jeanne Roth	Wheeling
Judith San Julian	Clarksburg
Jacqueline Tiano	Clarksburg
Jean Barr	Keyser
James Spiker	Inwood
Anne Winger	Shinnston

SCHEDULE OF COURSES FOR 1960-61

Course	Hr. Per Week			Hr. Per Semester			Semester Credit Hours
	Lect.	Lab.	Total	Lect.	Lab.	Total	
First Year—First Semester							
Gross Anatomy 201	2	7	9	32	112	144	6
Microscopic Anatomy 205	3	9	12	48	144	192	6
Medical Biochemistry 231	1	8	12	64	128	192	7
Correlation Clinic 277	1	0	1	16	0	16	1
First Year—Second Semester							
Gross Anatomy 202	3	10	13	48	160	208	6
Neuroanatomy 203	2	4	6	32	64	96	4
Physiology 241	7	8	15	122	128	240	9
Correlation Clinic 278	1	0	1	16	0	16	1
Second Year—First Semester							
Medical Microbiology 221	3	9	12	48	144	192	6
General and Tumor Pathology 251	4	10	14	64	160	224	6
Physical Diagnosis 291	2	0	2	32	0	32	2
Introductory Medicine 293	1	1	2	16	16	32	1
History of Medicine 275	1	0	1	16	0	16	1
Principles of Surgery 281	2	0	2	32	0	32	1
Second Year—Second Semester							
Public Hygiene 222	2	0	2	32	0	32	2
Special Pathology 252	1	2	3	16	32	48	2
Clinical Pathology 254	2	6	8	32	96	128	3
Medical Pharmacology 262	5	6	11	80	96	176	6
Physical Diagnosis 292	0	2	2	0	32	32	1
Introductory Medicine 294	1	1	2	16	16	32	1
Principles of Surgery and Surgical Anatomy 282	0	2	2	0	32	32	2
Introduction to Obstetrics 296	2	0	2	32	0	32	2
Parasitology 218	1	2	3	16	32	48	2
Third Year							
Clinical Clerkships in:							
Medicine							
Surgery							
Pediatrics							
Obstetrics and Gynecology							
Clinical Courses in Psychiatry and in Public Health and Preventive Medicine							

BEQUESTS FOR WEST VIRGINIA UNIVERSITY

SUGGESTED FORMS

Inquiries concerning bequests or other gifts to The Board of Governors of West Virginia University, or to The West Virginia University Foundation, Incorporated should be addressed to the Office of the President, West Virginia University, Administration Building, Morgantown, West Virginia.

The following are suggested as appropriate forms for bequests to The Board of Governors of West Virginia University:

General

I give and bequeath to THE BOARD OF GOVERNORS OF WEST VIRGINIA UNIVERSITY, a corporation existing under the laws of the State of West Virginia, the sum of Dollars to be used for the general purposes of The University at the discretion of The Board of Governors.

Specific

I give and bequeath to THE BOARD OF GOVERNORS OF WEST VIRGINIA UNIVERSITY, a corporation existing under the laws of the State of West Virginia, the sum of Dollars and direct that the income therefrom shall be used only for the following purpose or purposes:

(Here specify in detail the purpose or purposes.)

The following are suggested as appropriate forms for bequests to The West Virginia University Foundation, Incorporated:

General

I give and bequeath to THE WEST VIRGINIA UNIVERSITY FOUNDATION, INCORPORATED, a corporation existing under the laws of the State of West Virginia, the sum of Dollars to be used for general purposes of The University at the discretion of the Foundation.

Specific

I give and bequeath to THE WEST VIRGINIA UNIVERSITY FOUNDATION, INCORPORATED, a corporation existing under the laws of the State of West Virginia, the sum of Dollars and direct that the income therefrom shall be used only for the following purpose or purposes:

(Here specify in detail the purpose or purposes.)

